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BEHAVIOR AND EFFECTIVENESS OF FIRST-LINE SUPERVISORS

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The purpose of this study was to expand the current understanding of the factors related to first-line supervisory effectiveness. Data were collected from over 400 employees from three Navy Public Works Centers. Structured questionnaires and interviews were the primary means of data collection. Among the variables examined in relation to supervisory effectiveness were: supervisory behavior, workers' trust in and loyalty to their supervisors, supervisors' trust in and loyalty to their bosses, personal characteristics of supervisors, job satisfaction of workers and supervisors, bosses' and workers' expectations of supervisors' actions, and characteristics of supervisory jobs. The study showed that (1) supervisors have inaccurate perceptions of what their bosses and workers expect of them and these inaccuracies are related to lower levels of supervisory performance and job satisfaction; (2) inaccurately perceived expectations were most pronounced when interaction of bosses and workers with supervisors was infrequent; (3) supervisors are frequently faced with conflicting expectations from their bosses and their workers, suggesting a need for increased communication and/or compromise; (4) supportive

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supervisory behaviors were positively associated with supervisory effectiveness while demanding behaviors were negatively associated with it; (5) the most distinguishing characteristic between the most and least effective supervisors was the level of trust expressed by their workers; (6) there were no substantial differences in behaviors related to effectiveness between blue and white collar supervisors. A number of recommendations are made to supervisors and managers for improving the effectiveness of first-line supervision.

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BEHAVIOR AND EFFECTIVENESS
OF FIRST-LINE SUPERVISORS

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BEHAVIOR AND EFFECTIVENESS OF FIRST-LINE SUPERVISORS

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FOREWORD

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SUMMARY

Problem

Previous studies have identified ineffective first-line supervision as a reason for the less than optimal productivity among the federal workforce. These findings suggest that attempts to improve the effectiveness of Navy organizations should be focused on improving first-line supervision.

Purpose

The purpose of this study was to expand the current understanding of the factors related to first-line supervisory effectiveness in order to make recommendations for improvement.

Approach

Data were collected by means of interviews and questionnaires. Over 400 employees at three Navy Public Works Centers (PWCs) participated. Interviews were conducted with a sample of workers and supervisors at the outset to obtain a thorough picture of the role of the first-line supervisor. Questionnaires were administered to 98 first-line supervisors as well as to their bosses and their workers. Follow-up interviews were conducted with supervisors and managers to obtain feedback about the study's results.

Results

1. Supportive supervisory behavior was highly, positively related to supervisory effectiveness.

2. Supervisors had inaccurate perceptions of what their bosses and workers expected of them.

2a. Greater inaccuracy of supervisors' perceptions of what was expected of them was related to lower supervisory effectiveness.

2b. Accurate perceptions of expectations were positively associated with the amount of time supervisors spend interacting (either socializing or discussing work) with bosses and workers.

3. A good deal of conflict exists between bosses and workers in what they expect of supervisors. These conflicts are not conducive to supervisory effectiveness or job satisfaction among supervisors and workers.

4. Accessibility of supervisors to workers to answer their questions was highly, positively related to supervisory effectiveness.

5. The number of persons supervised was not related to supervisory effectiveness.

6. Both workers' and supervisors' levels of job satisfaction were positively related to supervisory effectiveness.

7. Higher levels of worker trust toward the supervisor were strongly associated with greater supervisory effectiveness.

8. Personal characteristics of supervisors were significantly related to supervisory effectiveness ratings. Adaptability, self-confidence, honesty, and fairness were strongly related to effectiveness. Being strict and aggressive were associated with ineffectiveness.

9. Supportive supervisory behavior (e.g., is understanding, resolves conflicts) was associated with higher levels of trust, loyalty, and job satisfaction and with positive personal characteristics of supervisors.

10. Supervisors rated themselves between neutral and satisfied on most aspects of their jobs. They were less satisfied if they were unsure of their responsibilities or overloaded with work.

11. Blue and white collar supervisors differed little in their behaviors, their perceptions of their bosses and workers' expectations, and the factors most related to effectiveness.

Conclusions

There are several general themes that emerge from this study. First, communication and interaction between supervisors and relevant others are important. Supervisors need to be aware of the importance of communication and should take steps to promote and encourage interaction. Second, the degrees of worker trust and loyalty toward the supervisor are important. Supportive supervisory behaviors, increased job satisfaction, and greater supervisory effectiveness are associated with workers' level of trust in their supervisors. Third, supervisors seem to face a good deal of conflict both by inaccurately perceiving what is expected of them and in confronting the differing expectations from bosses and workers. These conflicts could be reduced by increased communication and compromise. Fourth, the majority of the data from this study suggest that there is a set of positive interactions and outcomes with respect to supervision. Accurate and frequent communication between levels, availability of supervisors to workers, trusting relationships, supportive supervisory behaviors, job satisfaction among workers and supervisors, and supervisory effectiveness seem to occur at the same time. Likewise, when the opposites of these constructs occur together, they promote ineffectiveness.

A supervisor has to be able and willing to do more than just "know the job." This study suggests that interpersonal factors cannot be ignored in future attempts to improve supervisory effectiveness.

A number of recommendations are made to supervisors and managers for improving communication, reducing conflict, promoting supportive supervisory behavior, developing trust and loyalty among subordinates, being available to workers, and improving job satisfaction.

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INTRODUCTION

Problem

Ineffective first-line supervision has been implicated as a reason for less than optimal productivity among the federal workforce (U.S. Office of Personnel Management, 1980). A study of impediments to productivity (Broedling, Crawford, Kissler, Mohr, Newman, White, Williams, & Young, 1980) also identified ineffective first-line supervision as a factor among the Navy's civilian employees. These findings suggest that attempts to improve the effectiveness of Navy organizations would do well to consider improving first-line supervision.

Purpose

The purpose of this study was to expand the current understanding of the factors related to first-line supervisory effectiveness. A comprehensive approach was used which included the study of supervisory behavior, supervisory effectiveness, and a number of factors potentially related to behavior and effectiveness. This approach was used to obtain a more complete picture of supervisory effectiveness than was previously available and to provide a basis for making recommendations for improvement.

Background

Leader Effectiveness

Leadership has been described as a "universal phenomenon" (Bass, 1981) and has received extensive attention in the research literature (Sheridan, Vredenburgh, & Abelson, 1984). Much of this research has focused on the effectiveness of individuals in leadership or managerial positions, yet there is little consensus concerning what constitutes effectiveness, its determinants or correlates (Tsui, 1984b).

One reason for the lack of consensus may lie in the nature of the managerial role. A manager's responsibility to many different levels of the organization and across many different levels of competence renders a single evaluation insufficient. Lawler (1967) recommended a "multi-trait, multi-rater" (MT-MR) method for evaluating managerial effectiveness, essentially calling for supervisory evaluations from peers, the supervisor's superior and subordinates, as well as self-evaluations across many measures of effectiveness. While this approach would seemingly speak directly to the complexities of the management position and its evaluation, few studies have actually used this procedure (Tsui & McGregor, 1982).

Recommendations to obtain evaluations from different organizational levels and on many variables only address part of the problem of examining supervisory effectiveness. The MT-MR method does not provide guidelines concerning which of the many possible evaluation measures are most appropriate nor does it suggest factors relevant to effectiveness. Role theory (Katz & Kahn, 1978) is both consonant with the MT-MR approach and provides considerable insight into the possible mechanisms of effective supervisory behavior. An MT-MR approach to supervisory effectiveness guided by a relevant role theory model could represent a significant advancement in our overall conceptualizations of supervisory effectiveness and its measurement.

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Expectations

Empirically, researchers have documented the effect of a cognitive component on subsequent behavior (see Harvey & Weary, 1984, or Kleinke, 1984, for reviews). Recent work associating role theory and leader behavior speaks directly to the importance of an examination of an individual's beliefs concerning what is expected of him.[1] From a role theory perspective (Katz & Kahn, 1978), a leader acts in response to the demands and expectations of those with whom he interacts, suggesting that inaccurate perceptions of expectations could lead to detriments in supervisory performance and subsequent evaluations.

Specifically, divergence of expectations can be identified between superior and subordinate levels (i.e., conflict) as well as divergence of opinion between the supervisor and the levels above and below him (i.e., accuracy of the supervisors' perceptions of what others expect). Pfeffer and Salancik (1975) found that supervisors' perceptions of expectations were important determinants of supervisory behavior. They also found that some supervisors behaved more in accordance with their subordinates' expectations while others were more influenced by their superiors. By not fulfilling one or the other group's expectations, the supervisor may experience role conflict, job stress, job dissatisfaction and decreased confidence in the organization (Kahn, 1974a). Tsui (1984a) found that the extent to which a supervisor is able to meet relevant others' expectations is positively related to performance evaluations and promotions. She asserts that meeting such expectations is a good indicator of supervisory effectiveness. These studies point out the potential negative impact that inaccurate perceptions of expectations and conflicting expectations could have upon organizational functioning as well as supervisory effectiveness.

Accuracy of Expectations

Much of a role set analysis of leader behavior deals with the understanding of significant others' expectations. Accurate perception of expectations of one's subordinates may depend, at least in part, on the number of subordinates in a supervisor's workgroup (House & Minor, 1969). Accuracy may also be influenced by the amount of time the supervisor and subordinates spend together (Newcomb, 1963). A role set MT-MR approach to leader effectiveness calls for the examination of variables such as these at different levels in the organization.

Trust and Loyalty

A leader's inclination toward cooperative behavior with his subordinates has been positively linked with the subordinates' levels of satisfaction with aspects of their work and their desire to perform well (Tjosvold, Andrews, & Jones, 1983). Deutsch (1973) has hypothesized that a supervisor's cooperative orientation toward subordinates produces a positive effect through the development of trust. Meeker (1984) has also found support for this interpretation. Additionally, Gibb (1965) found trust to be an important element in the methods that management chose for dealing with its subordinates.

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[1] "He" will be used in place of "he/she" throughout this report for ease of reading.

Closely related to the concept of trust is that of loyalty. Marcus and House (1973) describe loyalty as a reward subordinates give to supervisors. Vice Admiral W. P. Lawrence (1985), in his description of good leaders, said that good leaders understand the importance of loyalty, both upward and downward. The concept, however, has not been empirically examined in relation to trust, leader behavior, or leader effectiveness.

The literature cited above describes the importance of the nature of the interaction between a supervisor and his subordinates on relevant organizational variables. This literature fits well within the framework of a role theory approach to leader behavior and effectiveness. Also of relevance are characteristics of the supervisor and the job, which are discussed below.

Job Characteristics

Job complexity and autonomy have generally been associated with measures of worker affect and job-related behavior (Pierce, Dunham, & Cummings, 1984). Lawler (1971); Porter, Lawler, and Hackman (1975); and others (see Kabanoff & O'Brien, 1979; Morse & Lorsch, 1970) have argued for structuring or designing jobs to increase job satisfaction, motivation, and performance. Pierce, Dunham, and Blackburn (1979) present data supporting this argument. Barrow (1976) found that some leader behaviors were affected by the complexity of the subordinate's task. Clearly, the relationship of job characteristics to leader behavior and effectiveness should be investigated.

Personality Characteristics

Bass (1981), in his extension of Stogdill's Handbook of Leadership, has reviewed much of the leadership trait literature. In Bass' extension, many leader traits are described along with their relationship to some measure of leader performance. Such traits as intelligence, dependability, aggressiveness, sociability, and adaptability have been associated with leader style and effectiveness. These characteristics are often discussed in the context of necessary traits of an effective leader. Considering the long history of the study of trait concepts in leader effectiveness and the breadth of the literature, any study attempting an in-depth examination of leader effectiveness and its correlates would do well to explore the leader behavior/leader trait relationship.

Job Satisfaction

Accurate measurement of supervisory effectiveness and determination of its variables is only part of a thorough analysis of leader behavior. It is of utmost importance to the organization to retain its effective supervisors. Job satisfaction has consistently been inversely associated with job turnover (Hom, Griffith, & Sellaro, 1984). Conditions which affect both leader effectiveness and leader job satisfaction, or simply leader satisfaction alone, would be of great importance in training and maintaining an effective management corps.

Also important to the organization is worker job satisfaction, both as an indicator of organizational well-being and as a measure of supervisory effectiveness. Job satisfaction is a frequently used indicator of leader effectiveness (Hollander, 1985, in press) and should be assessed in any thorough study of leader behavior.

3

APPROACH

Sample

Data were collected through interviews and questionnaires completed by employees at three Navy Public Works Centers (PWCs). The Navy PWCs provide engineering, maintenance (including rehabilitation construction), utilities, transportation, and housing to U.S. Navy customers within their geographic area. There are nine PWCs worldwide. Three were included in this study: PWC Pearl Harbor, HI; PWC San Diego, CA; and PWC Great Lakes, IL. From these PWCs, 106 first-line supervisors were randomly selected from a total of 63 divisions. Three subordinates (workers) who worked directly for each supervisor were also chosen randomly from personnel listings. In cases where a supervisor did not have three workers, or three were not available, the one or two available were asked to participate. Each supervisor's immediate superior (boss) was also asked to complete a questionnaire.

While every effort was made to obtain data from three workers under each supervisor, in many cases workload pressures would not permit this level of participation. In other cases the worker data were incomplete. Fortunately, complete data were obtained from at least one subordinate working for each of the supervisors who participated. Because several research questions concerned degrees of agreement between individuals at different hierarchical levels and because other questions concerned individual variables such as job satisfaction or job ambiguity, worker perceptions were not averaged. Instead, one worker below each supervisor was randomly selected to comprise the worker sample. The only exception to this was in the creation of a composite supervisory behavior measure. This measure is described in the results section.

The final sample consisted of 98 first-line supervisors, each supervisor's immediate superior, and one or two subordinates for each supervisor. The average ages of employees at different levels were: bosses, 48 years; supervisors, 47 years; and workers, 43 years. The sample included 68 percent blue collar and 32 percent white collar workers and their first and second level supervisors. Respondents were primarily male: 90 percent of bosses, 84 percent of supervisors, and 77 percent of workers. Bosses and supervisors were predominantly white at the PWCs in San Diego and Great Lakes and primarily Asian at PWC Pearl Harbor. There were, however, 13 minority supervisors in San Diego and 9 white supervisors in Pearl Harbor. The majority of bosses, as well as supervisors, had worked in their present jobs for 2 to 4 years. Most workers had worked for their present supervisors 1 to 3 years. Because of the small sample sizes in most of the biographic categories, comparative analyses were generally not performed. Blue and white collar supervisors were compared, however, and these results are presented in a later section.

Preliminary Interviews

Before the construction of the questionnaire, structured group interviews (Nominal Group Technique, see Delbecq, Van de Ven, & Gustafson, 1975) were conducted with both first-line supervisors and workers to obtain information concerning first-line supervisory behavior and expectations of supervisory behavior at the PWCs. Each interview session lasted about one hour. Eighteen supervisors and 18 workers were interviewed in groups of six at PWC San Diego, and 17 supervisors and 19 workers were interviewed in groups of six at PWC Pearl Harbor. Group participants were selected randomly, and workers and supervisors were interviewed separately. Employees who participated in interviews were not asked to complete questionnaires.

Questionnaire Design

Questionnaires were designed for each hierarchical level. The form administered to each boss measured: expectations that a boss has of the supervisor, perceived behavior of the supervisor, perceptions of supervisory effectiveness, and demographic/biographic characteristics of the boss (see Appendix A). The supervisor's form measured: supervisor's perceptions of the boss' expectations, perceptions of the workers' expectations, perceptions of own behavior, trust in the boss, loyalty to the boss, perceived similarity to the boss, job satisfaction, frequency of interaction with the boss and workers, role stress, anticipated consequences of actions, and demographic/biographic characteristics (see Appendix B). The worker's form measured: expectations that a worker has of the supervisor, perceived supervisory behavior, trust in the supervisor, loyalty to the supervisor, perceived similarity to the supervisor, work group climate, personal characteristics of the supervisor, perceptions of supervisory effectiveness, job satisfaction, job characteristics, frequency of interaction with the supervisor, role stress, actions the worker would take, and demographics/biographic characteristics (see Appendix C).

A brief description of the scales and items constituting each version of the instrument is presented in Table 1. (Tables appear together at the end of the text beginning on page 23.)

Questionnaire Administration

Questionnaires were administered to groups of 10 or 15 by hierarchical level. A Navy Personnel Research and Development Center (NAVPERSRANDCEN) representative familiar with the purpose of the study was in charge of each questionnaire session. Respondents were informed that the questionnaire examined first-line supervisory behavior and expectations of first-line supervisors. To guarantee that a supervisor's boss and one or two of his workers also completed questionnaires, respondents were identified by name in the research records. Only respondent numbers appeared on the questionnaires and confidentiality was guaranteed to each respondent. After questionnaires were distributed, instructions for each section were carefully reviewed by the NAVPERSRANDCEN representative. This representative was also available throughout the administration of the questionnaire to answer any additional questions. The questionnaire required approximately one hour to complete.

Follow-up Interviews

Following analyses of questionnaire data, interviews were conducted with five department heads at PWC San Diego and with 69 first-line supervisors at PWC Pearl Harbor. These interviews were conducted to provide feedback concerning the results of the study. Department heads at PWC San Diego were selected because of the convenience of the San Diego location. These interviews were conducted individually. The Commanding Officer at PWC Pearl Harbor requested that all of its first-line supervisors participate so that they could receive feedback about the study. These supervisors were briefed and interviewed in groups of 8-12.

RESULTS

Construction of Scales

The questionnaire was organized by topic area (e.g., supervisory behavior, job satisfaction). To reduce the number of items within each topic area, factor analyses were

performed on items in each area. The factor analyses were not used in the traditional sense for creating factor scores, but were used as an interpretive tool for determining ways of combining items into scales. An item was included as relevant to a particular factor if it loaded at least .40 on that factor. If factor analyses yielded only one factor, an item was included in a scale if it made a positive contribution to the standardized alpha for that scale (i.e., removing the item lowered the alpha). Once constructs were determined, scales were computed simply by computing the average of the items included on each factor. Appendices D, E, and F present summaries of the scales created from the questionnaire items. Also included in these appendices are the standardized alpha coefficients (or Pearson correlations) for each scale.

Supervisory Behavior

As can be seen in Appendix D, the items describing supervisory behavior fell neatly into two scales that describe what might be called supportive and demanding supervisory behavior.

Expectations

As well as being asked to describe supervisory behavior, supervisors, workers and bosses were also asked what they expected of supervisors. Supervisors were asked what they thought was expected of them by their workers and their bosses on the 46 items concerning their job behavior. Bosses and workers were asked what they actually expected of supervisors based on those 46 items. These measures of expectations are analyzed in a variety of ways to provide insight into the accuracy of supervisors' perceptions and conflicts between bosses' and workers' expectations of supervisors.

Job Characteristics, Personal Characteristics, Job Satisfaction, Work Group Climate, Job Ambiguity, and Job Overload

Additional scales created from factor analyses of questionnaire items are presented in Appendix E. The 27 job characteristics items comprised five scales measuring job complexity/autonomy, blue collar versus white collar, routineness, work location, and closeness of supervision. Two scales were created from the questionnaire items measuring supervisor personal characteristics; these scales were labeled positive characteristics and negative characteristics. Items measuring job satisfaction produced three similar scales for supervisors and workers which depicted: satisfaction with boss (or supervisor), satisfaction with job and co-workers, and satisfaction with pay. Two scales were created from the work group climate items: work group cooperation/morale and work group performance. Two scales were created from role stress items which measured job ambiguity and job overload.

Trust and Loyalty

A number of other topic areas did not factor into more than one scale, therefore, the fact of whether or not an item made a positive contribution to the alpha coefficient was used as the means of selecting items for these scales. Scales were created to measure worker trust in his supervisor and worker loyalty to his supervisor, as well as supervisor trust in his boss and supervisor loyalty to his boss (Appendix F).

Supervisory Effectiveness

Measurement of supervisory effectiveness was based on nine aspects of supervision as rated by bosses and workers. The nine criteria of effectiveness were: technical

competence, administrative competence, getting along with workers, getting along with the boss, giving directions clearly and when needed, performing under pressure, cooperating with other supervisors to get the job done, dependability, and getting or encouraging workers to do a good job. Three indices of supervisory effectiveness were created (see Appendix F): one index measured bosses' perceptions of effectiveness, one measured workers' perceptions of effectiveness, and a third measured overall effectiveness. The overall measure was created by averaging the 18 ratings made by both workers and bosses. This measure was the index most often used as the measure of effectiveness because it was believed that this measure presented the best overall picture of supervisory effectiveness. Measures of supervisory effectiveness based only on bosses' or workers' evaluations were used at times for more discrete analyses of supervisory effectiveness.

Frequency of Interaction

An index of the frequency of interaction between workers and supervisors was created by combining questionnaire items on which workers estimated the time they spent talking with their supervisor about work and the time they spent talking or socializing informally. These two items on the supervisory form were combined to measure supervisors' estimates of the frequency of interaction with their bosses.

Findings Concerning Supervisory Effectiveness

Supervisory Behavior and Effectiveness

As was discussed in an earlier section, supervisory behavior fell into two categories representing supportive and demanding behavior. The relationship between the overall measure of supportive supervisory behavior and the combined measure of supervisory effectiveness (EFF) was high and in a positive direction ($r = .69$). The more supervisors engaged in supportive behaviors, the higher were the evaluations of their effectiveness.

At a more specific level, there seemed to be individual behaviors that were more related to effectiveness than others. Correlations between the 46 individual descriptions of supervisory behavior and effectiveness are presented in Table 2. In general, most of the behaviors were significantly related to effectiveness in some way. Only 12 of the 46 behaviors were unrelated. Most of the supportive behaviors were positively related to effectiveness (e.g., is easy to understand, inspires loyalty, is able to resolve conflicts). Three of the demanding behaviors were negatively related to effectiveness (e.g., corrects workers' mistakes in front of others, emphasizes amount over quality, is reluctant to give in). These relationships suggest that the encouragement of certain supportive behaviors and the discouragement of certain demanding behaviors may lead to greater supervisory effectiveness.

Inaccurate Perceptions and Supervisory Effectiveness

Past research has found that expectations that relevant others hold toward individuals in supervisory jobs influence the behavior of supervisors (Pfeffer & Salancik, 1975). One point of interest in this study concerned the relevance of bosses' and workers' expectations of first-line supervisors to supervisory effectiveness. Tsui (1984a) has suggested that the extent to which a supervisor meets relevant others' expectations is an indicator of that person's effectiveness. If meeting the expectations of relevant others is important to effectiveness, the first prerequisite to meeting those expectations is knowing what they are.

Of particular interest were supervisors' perceptions of bosses' and workers' expectations in contrast to bosses' and workers' actual expectations. Supervisors were asked what they thought was expected of them by their workers and their bosses on the 46 items concerning their job behavior. A supervisor's expectations were considered inaccurate to the extent that they differed from the actual expectations of his workers and his boss.

To measure the accuracy of communication of expectations, one-way analyses of variance were used to compare the measures of workers' and bosses' actual expectations of the supervisor's behavior with the supervisor's perceptions of them. Item averages, F-values, and significance levels for these analyses are presented in Tables 3 and 4. Tests of significant differences between supervisors' perceptions of their bosses' expectations and their bosses' actual expectations are presented in Table 3. Table 4 presents analyses addressing the differences between supervisors' perceptions of workers' expectations and their workers' actual expectations.

It is apparent from Tables 3 and 4 that there are many statistically significant differences between what supervisors think their workers and bosses expect of them and what these people actually expect of their supervisors. Supervisors' perceptions of their bosses' expectations were different on 29 of the 46 supervisory behavior items and were different from their workers' expectations on 22 of the 46 behavior items. These differences suggest that supervisors do not have a very accurate picture of what is expected of them.

Recognizing that inaccurate perceptions of expectations existed, we made an effort to determine whether these inaccurate perceptions were related to indicators of supervisory effectiveness or other important organizational variables. To proceed with this, initially four indices of discrepancies of expectations were created. These indices measured discrepancies between supervisors' perceptions of bosses' and workers' expectations and bosses' and workers' actual expectations for both the supportive and demanding aspects of behavior. For example, supervisors' perceptions of bosses' expectations for supportive behavior minus bosses' actual expectations for supportive behavior constituted one of the four discrepancy scores created.

These four indices of inaccuracy were correlated with measures of supervisory effectiveness and job satisfaction. The results of these analyses are presented in Table 5. As can be seen from this table, supervisors' inaccurate perceptions of their bosses' expectations of demanding behavior were significantly and negatively correlated with bosses' evaluations of supervisors' effectiveness. That is, the more inaccurate the supervisor's perceptions of what his boss expects of him in the area of demanding behaviors, the lower the boss' evaluation of the supervisor's effectiveness. Additionally, the less accurate the supervisor's perceptions of his boss' expectations of both supportive and demanding behaviors, the less satisfied the supervisor was with his boss. With respect to inaccurate perceptions of workers' expectations, the less accurately the supervisor perceived his workers' expectations of supportive behaviors, the less the supervisor was satisfied with his job, his co-workers, and his pay. Given the imprecision and, consequently, the reduced reliability in these aggregated measures of inaccuracy, there appears to be support for the conclusion that inaccurately perceived expectations are dysfunctional.

Considering the indications both in this study and in previous research that inaccurate perceptions of relevant others' expectations can be dysfunctional (Van Sell, Brief, & Schuler, 1981), the areas of greatest supervisory misperception were investigated. Tables 6 and 7 present the behaviors for which supervisors' perceptions of what was expected of them were most inaccurate.

As can be seen from these two tables, generally supervisors were not aware of the extent to which their bosses thought they should engage in supportive behaviors. For instance, supervisors underestimated the extent to which their bosses thought they should support opportunities for worker improvement. Bosses also felt supervisors should be more accepting of workers' suggestions than supervisors realized. Furthermore, supervisors generally believed that their bosses expected them to engage in demanding behaviors to a greater extent than bosses actually expected. Supervisors thought their bosses wanted them to discipline harshly, demand respect, ask for extra work, and insist workers follow standard ways to a greater extent than were actually expected by their bosses.

In looking at the discrepancies regarding workers' expectations, it seems that workers did not expect supervisors to engage in supportive behavior to the extent that supervisors thought they did. Supervisors thought they were expected to stand up for workers, let workers know when they had done a good job, and accept workers' suggestions for changes to a greater extent than workers actually expected. This is not to say that workers did not want supervisors to do these things, but only that they were not as insistent on being treated in a supportive manner as the supervisors thought. Likewise, workers were more tolerant of demanding behaviors than supervisors realized.

In order to get a better understanding of factors related to the accuracy of supervisors' perceptions, correlations between potentially relevant variables and overall indices of inaccuracy were computed. The results of these analyses are presented in Table 8. Accuracy of supervisors' perceptions of bosses' expectations was positively related to the amount of time the supervisor spent interacting with his boss (either talking about work or socializing informally) and to the number of subordinates under the supervisor. It might be that when a supervisor has more subordinates than others he needs to interact more with his boss in order to coordinate work. Interaction seems to be conducive to accurately perceiving expectations.

Accuracy of supervisors' perceptions of workers' expectations, on the other hand, was primarily related to the characteristics of the workers' jobs. Supervisors of workers with less routine and less physically active jobs had more accurate perceptions of their workers' expectations. It may be that these two factors promote accurate expectations because the workers and supervisor are more likely to interact.

Conflicting Expectations and Supervisory Effectiveness

The organizational literature cites many examples of first-line supervisors facing conflicting situations where they are "caught in the middle" between workers who expect one thing and bosses who expect another (Van Sell, Brief, & Schuler, 1981). Supervisors in such situations are confronted with constant pressure in their attempts to meet each group's expectations.

Bosses' and workers' expectations of the first-line supervisor's behavior were compared statistically to determine whether these two groups really expected different things from supervisors. The results of these tests are presented in Table 9. On almost half of the 46 behavior items, bosses and workers had significantly different expectations of the supervisor. In general, bosses expected more supportive and less demanding behavior than did workers, even in areas relevant to workers (e.g., letting workers know when they have done a good job).

To determine whether the differences in expectations between workers and bosses had debilitating effects on supervisory effectiveness, an aggregate measure of worker-

boss disagreement in expectations was computed and correlated with bosses' and workers' evaluations of supervisory effectiveness. These correlations are presented in Table 10. It is worthwhile to note that while most of the correlations between conflict and ratings of effectiveness are not statistically significant, they are almost all negative. The few significant correlations suggest that supervisors working under conflicting expectations are likely to be less effective when performing under pressure, less likely to be satisfied with their pay, and more likely to experience ambiguity about their job responsibilities.

Job Characteristics and Supervisory Effectiveness

Individual questionnaire items measuring job characteristics were correlated with overall supervisory effectiveness. The significant correlations between job characteristics and effectiveness are presented in Table 11. One relationship is noteworthy. Item 18, which asked about the extent to which "your supervisor is available to answer questions either in person or by telephone," was highly related to supervisory effectiveness ($r = .51$). When supervisors were seen as available, they were rated as more effective by their bosses and workers.

Because of the importance of availability, this item was compared by department across the three PWCs to determine if there were departments in which supervisors were less available than others. Table 12 presents the average ratings of supervisor availability for departments 400 (Maintenance Engineering), 500 (Maintenance), 600 (Utilities), 700 (Transportation), and 800 (Material). These departments are presented because they had samples sufficient in size to warrant generalization. Generally, departments 500 and 800 seem to have the greatest problems with supervisor availability. In these two departments supervisors were seen as available only slightly more than "occasionally." (It is likely that the level of availability is due to the nature of the work and the geographic dispersion in these departments.) Supervisory availability was less of a problem in the other departments.

Number of Workers Supervised and Supervisory Effectiveness

It was hypothesized that a supervisor's span of control, or the number of people he supervises, would relate to supervisory effectiveness. As can be seen from Table 13, span of control was not directly related to supervisory effectiveness. Span of control was, however, related to other variables which may have relevance to effectiveness. Number of people supervised was related to the extent to which supervisors engaged in demanding behaviors; those who supervised more people used more demanding behaviors. Supervisors who were responsible for more subordinates also expressed somewhat less role ambiguity, spent more time interacting with their bosses, supervised workers less closely, and expressed more trust in and loyalty to their bosses.

Job Satisfaction and Supervisory Effectiveness

The extent to which job satisfaction is related to performance or effectiveness is an age-old question that has been researched extensively in many job contexts. For our purposes, it provides an indication of whether any improvements in effectiveness could be anticipated if job satisfaction were improved. Table 14 presents the correlations between aspects of worker and supervisor satisfaction and supervisory effectiveness, work group morale, and work group performance. Causality cannot be inferred from correlational data but, in general, there is a fair degree of relationship between levels of job satisfaction and both supervisory effectiveness and work group performance and morale. Worker satisfaction with the supervisor is most highly related to supervisory effectiveness, while worker satisfaction with the job and co-workers is most highly related to work

group performance and morale. Measures of supervisor satisfaction were also related to supervisory effectiveness, work group performance, and morale.

Distinguishing Most and Least Effective Supervisors

Discriminant analysis is a statistical technique which may be used for interpreting group differences. For the purposes of this study, a discriminant analysis was performed to identify any factors which may discriminate between the most and least effective supervisors. Those supervisors considered most effective were those rated as very effective by both their workers and their bosses (average effectiveness ratings were greater than 4.5 on a 5-point scale). Those considered least effective were rated as such by both workers and bosses (average effectiveness ratings less than 3.0). The variables chosen as potentially discriminating were those that were significantly related to the overall measure of effectiveness.

Results for this discriminant function analysis are presented in Table 15. Because the number of groups being compared is two, the maximum number of discriminant functions which can emerge is one. The intention of this analysis was to try to understand the variables which are likely to distinguish effective and ineffective supervisors. Classification of supervisors of unknown effectiveness into one of the two groups was not of interest. The standardized discriminant function coefficients are similar in interpretation to beta weights in regression analysis; they indicate the relative importance of the variables to the discriminant function. The highest standardized coefficient was .81 for worker trust in supervisor. Also significant in distinguishing most effective supervisors from least effective were the absence of negative personal characteristics, the availability of the supervisor to the workers, and the level of trust the supervisor had in the boss.

The average level of worker trust for the most effective supervisors was 4.3 on a 5-point scale, as opposed to 2.3 for the least effective supervisors. The differences in worker loyalty between most and least effective supervisors were also large (4.5 = most effective; 2.8 = least). However, the low contribution of this variable to the discriminant function is probably due to the high degree of relationship between trust and loyalty. Due to the small sample sizes (n's = 11 and 13) and the preselection of discriminating variables, the results from this analysis should be considered tentative. Nevertheless, the large mean differences between the two groups, particularly concerning trust, seem to render a degree of validity. Because of this probable importance of trust to supervisory effectiveness, it will be discussed in relation to a number of other relevant individual and organizational variables in a later section of this report.

Characteristics of the Supervisor and Supervisory Effectiveness

Many of the personal characteristics of the supervisors, as described by their workers, were significantly related to supervisory effectiveness ratings. As can be seen from Table 16, characteristics such as being adaptable, self-confident, honest, fair, and strong were significantly related to effectiveness. This is consistent with the discriminant analysis described above in which the aggregate measure of negative personal attributes was descriptive of the least effective supervisors.[2]

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[2] While this finding is not counterintuitive, it has greater validity in that the supervisory behavior measure used combined a number of individual perceptions. The correlations between personality traits and behaviors are not strictly due to the same source variation.

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Findings Concerning Supervisory Behavior

For the purposes of promoting optimal supervisory effectiveness, it is important to determine the factors related to first-line supervisory behavior. This study attempted to identify those social and environmental factors highly correlated with the behavior of the supervisor.

Job Characteristics and Supervisory Behavior

One question in this study concerned the degree to which job characteristics were related to the way supervisors behaved. In order to assess these relationships, the overall indices of supportive and demanding supervisory behavior were correlated with the 27 individual job characteristic items. The significant correlations are presented in Table 17.

Job characteristics that are positively related to supportive supervisory behavior are: doing a job from start to finish, independence in work, frequent instruction from the supervisor, and having an available supervisor. Job characteristics related to demanding supervisory behavior are: working in an area with a great deal of noise, working on dangerous jobs, or working in jobs that require a lot of physical activity. Demanding behavior was also associated with jobs in which the supervisor was not nearby and in which the location of the jobs changed within a year.

Worker Job Satisfaction and Supervisory Behavior

Additional analyses were performed to assess the relationship between worker satisfaction and particular supervisory behaviors. Table 18 presents the correlations between each aspect of worker satisfaction and the 46 supervisory behaviors. As can be seen, how the supervisor behaves is highly related to worker satisfaction. In general, supportive supervisory behaviors are related to greater worker satisfaction with their supervisors as well as to greater satisfaction with the job, co-workers, and pay. Demanding behaviors are generally associated with lower satisfaction among workers. It is also important to note the supervisory behaviors unrelated to satisfaction. These included demanding a lot of respect, wanting to be liked by workers, criticizing poor work, and deciding in detail what workers will do.

Table 19 provides an informative perspective on worker job satisfaction. It presents the average levels of job satisfaction for employees in different departments across the three PWCs. While many of the sample sizes are too small to warrant generalizations about departments, departments 400, 500, 600, 700, and 800 have fairly large samples. In looking at the averages in these departments, it is apparent that the levels of satisfaction are somewhat low. Of particular interest are the low levels of satisfaction in departments 600 (Utilities) and 800 (Material) particularly as they concern opportunities to develop skills and the quality of directions workers receive from their supervisors, aspects of the job over which supervisors often exert control.

Characteristics of the Supervisor and Supervisory Behavior

Table 20 presents correlations between personal characteristics of the supervisor and supervisory behavior. Not surprisingly, positive personal characteristics were associated with supportive behaviors. Being fair and adaptable were the characteristics most highly related. The characteristics most related to demanding behavior were strictness and aggression. With respect to supervisors, positive personal characteristics, supportive behaviors, and effectiveness were all interrelated.

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Trust and Loyalty and Supervisory Behavior

The relationships between supportive supervisory behavior and the degree of worker trust and loyalty toward the supervisor are quite strong (trust and behavior, r = .67; loyalty and behavior, r = .67). While the causal direction of these relationships cannot be asserted from correlational data, the strength of the relationships suggests that the two concepts of trust and loyalty are strongly associated with supportive behavior.

Also notable in discussing supervisory behavior is the significant positive correlation between loyalty of a supervisor to his boss and demanding supervisory behavior. Those supervisors who are more loyal engage in more demanding behaviors. It may be that these supervisors tend to make more demands because they believe (often inaccurately) that they are acting in ways that please the boss or meet his expectations. This is consistent with the perceptions supervisors have of their bosses' expectations--supervisors believe their bosses want them to be more demanding of workers than bosses actually expect.

Table 21 presents the correlations between worker trust toward the supervisor and the 46 supervisory behaviors. These correlations are displayed in categories representing the degree of relationship. Standing up for workers, being able to resolve conflicts, and inspiring loyalty were the supervisory behaviors most strongly related to worker trust. Being reluctant to give in when a worker disagrees, correcting workers' mistakes in front of others, and emphasizing quantity over quality were the behaviors most negatively related to trust.

Table 22 presents correlations between worker loyalty to the supervisor and supervisory behaviors. From this table, one will observe that the patterns of relationship that exist between loyalty and behavior are very similar to those found between trust and behavior. This is not unexpected given the high degree of relationship between trust and loyalty (r = .77).

Additional Findings Concerning Trust and Loyalty

Worker Trust in and Loyalty to Supervisor

Because trust in the supervisor was so highly related to supervisory effectiveness as well as to supervisory behavior, factors likely to contribute to trusting relationships were investigated. Table 23 presents the correlations between trust and loyalty and relevant job and supervisor characteristics. Positive personal characteristics of the supervisor were positively related to trust and loyalty, while negative personal characteristics produced negative relationships. The more complex the job, the greater the availability of the supervisor to his workers, and the more time the two spent interacting were also positively related to worker trust. These findings suggest the importance of interaction between workers and supervisors. This interaction can take the form of being available, interacting socially, or interacting on work-related matters.

Supervisor Trust in and Loyalty to Boss

The measure of supervisor trust toward his boss was a significant discriminating variable in distinguishing the most and least effective supervisors (Table 15). Those supervisors with a higher level of trust in their bosses were among the more effective supervisors. Two of the factors that related to supervisor trust and loyalty are interesting. First, and somewhat surprising, were the relationships between the closeness of supervision and the degrees of supervisors' trust and loyalty to their bosses. Those

supervisors who were reported by their workers to supervise <u>less</u> reported a higher degree of trust and loyalty toward their bosses (<u>r's</u> = -.20, -.29 respectively). While these relationships are not very large, it could be that the more loyal supervisors also felt more trust and loyalty toward their workers and, consequently, did not feel the need to supervise them closely.

Also important to a supervisor's sense of trust and loyalty toward his boss was his sense of clarity regarding his job responsibilities ($\underline{r}$, trust and clarity = .48; $\underline{r}$, loyalty and clarity = .44). Supervisors showed higher degrees of trust and loyalty when they felt a greater sense of clarity about their job responsibilities. This makes sense, especially if the boss is seen as the person responsible for giving the supervisor clear directions and priorities in his work. Those supervisors who felt they had received clear directions would be more likely to trust in and be loyal to bosses than those who were unclear of their duties.

Additional Findings of Interest

Supervisors' Satisfaction

The levels of supervisors' satisfaction with aspects of their jobs were also of interest in this study. Traditionally, research on organizations has concentrated heavily on job satisfaction of the workforce. Much less attention has been paid to the job satisfaction of first-line supervisors and the factors that may contribute to it. Table 24 presents the average levels of supervisor satisfaction by department across PWCs. In general, supervisors appear to be neutral to satisfied with most aspects of their jobs. Those in department 800 (Material) appear to be slightly less satisfied than those in other departments and their main dissatisfaction concerns pay.

Table 25 presents correlations between a number of variables and supervisor satisfaction. The significant relationship between supervisor satisfaction with his boss and his trust in and loyalty to that boss is not surprising. Also not surprising are the correlations between workers' levels of trust in and loyalty to their supervisors and the supervisors' degrees of satisfaction with their co-workers. More interesting are the relationships with job overload and job clarity. When supervisors felt overloaded with work or unclear about their responsibilities, they were less satisfied. These relationships indicate that keeping the responsibilities of supervisors at a reasonable level as well as providing clear ideas about job duties could result in improved supervisor satisfaction and may have positive benefits to the organization in the long run.

Job Characteristics: Blue Collar Versus White Collar

While job characteristics have been discussed in relation to the previously mentioned topics, there were a number of additional issues concerning job characteristics that were of interest.

Questions were addressed concerning the differences between blue and white collar supervisors: what was expected of them, what they did, and what was effective for each group. Supervisors were classified as blue or white collar on the basis of their pay schedule, General Schedule or Wage Grade, and one-way analyses of variance were computed on bosses' and workers' expectations of blue and white collar supervisors. The number of significant differences were few and the differences were small (see Table 26). Out of <u>two</u> sets of 46 analyses, only 9 variables were significantly different. Because four

or five variables out of the 92 could be expected to differ significantly by chance ($p <$ .05), the major point to be made from this table is that expectations of blue and white collar supervisors differed very little.

In assessing supervisory behavior, there were again few differences between blue and white collar supervisors. Table 27 presents the behaviors that differed significantly. Here, 8 out of 46 variables differed significantly. In general, the differences suggest that blue collar supervisors engage in some of the demanding behaviors to a greater extent than white collar supervisors. Conversely, white collar supervisors were more likely to allow workers freedom and to emphasize quality over quantity than were blue collar supervisors. The level of effectiveness of supervisors as well as the best predictors of effectiveness did not differ between the two groups.

DISCUSSION

The purpose of this study was to expand the current understanding of factors related to first-line supervisory effectiveness. This goal has been accomplished. The role theory approach allowed for the examination of the role of first-line supervisor from several perspectives and in relation to many different organizationally relevant variables. The discussion and conclusions that follow reflect the major accomplishments of this effort.

Conflicting Expectations

The position of the first-line supervisor is very complex. Bosses' and workers' expectations concerning a supervisor's behavior were shown to be different or conflicting. Role theory might assist in the explanation of this inconsistency by arguing that there is no reason to expect that the role expectations of these two groups would be the same. One might predict that workers' and bosses' expectations should differ at least to the extent that the supervisor's role differs with each of these groups. As such, the supervisor's job would be to recognize these inconsistent role expectations and find areas of compromise between them and deal with them to the best of his ability.

With respect to conflicting expectations and their resulting difficulties, there are two potential solutions at hand. Attempts can be made to (1) reduce the conflict in demands by making bosses and workers more aware of each others needs, and/or (2) increase supervisors' awareness of bosses' and workers' expectations so that they can be trained to make effective compromises between them. As Tsui (1984b) suggested, this ability to compromise may be integral to supervisory effectiveness.

Supervisors' Inaccurate Perceptions of Others' Expectations

If effective supervision depends in part on supervisors accurately perceiving bosses' and workers' expectations, it is important that these expectations are being communicated. Unfortunately, the data from this study indicate that supervisors' perceptions of what their bosses and workers expect of them are quite inaccurate in respect to many aspects of behavior and the inaccuracies are negatively associated with ratings of supervisory effectiveness. Undoubtedly, it must be difficult to be effective when one does not accurately perceive what one's superior and subordinates expect.

One variable suggested to mediate the relationship between bosses' and workers' expectations and the supervisor's accuracy in perceptions of those expectations is the amount of contact and communication that occurs between the supervisor and members of

these two groups. It appears that some jobs require more interaction between workers and their supervisors than others and that this interaction promotes more accurate perceptions by the supervisor of the supervisory behaviors expected by workers. The amount of time supervisors spend with their bosses is likewise important for supervisors to accurately perceive their bosses' expectations.

The degree to which supervisors accurately perceive expectations was also related to the ways supervisors behave toward others. The less accurate the supervisor's perceptions, the more the supervisor relied on demanding types of behavior. When his perceptions were more accurate, he seemed to use more supportive types of behavior. Considering the above information, one might speculate that the less the supervisor actually knows his workers, the more likely he is to resort to more formal, demanding types of behavior. Conversely, when supervisors have gotten to know their workers as individuals, they may be more likely to behave supportively.

Trust and Loyalty

The above interpretation concerning supportive and demanding behaviors is consonant with this study's findings concerning trust and loyalty. When a supervisor's workers trust him, the supervisor behaves in a more supportive manner. Trust was also associated with the amount of interaction between a supervisor and his subordinates. This suggests that trust develops when a supervisor and his workers know what is expected of the other and when each attempts to live up to the other's expectations.

The data concerning a supervisor's trust in and loyalty to his boss present a somewhat different picture. The more a supervisor expresses trust in his boss, the less likely he is to spend time interacting with his workers and the more likely he is to adopt demanding behaviors with workers. With reduced supervisor-worker interaction, the supervisor may feel less inclined to behave supportively and may instead use more demanding forms of behavior. The observation that demanding behaviors were common when supervisors had more subordinates than others is consistent with the finding that less interaction leads to more demanding behaviors. It is also possible that supervisors' overestimates of the extent to which they thought their bosses expected demanding behaviors contributed to their increased use. A demanding approach may be an attempt to please a trusted boss.

Trust also figured prominently in the differentiation between supervisors rated high and low in effectiveness. Supervisors rated as most effective by both their bosses and subordinates were those who were most trusted by their subordinates. Further, trust was related to more complex worker jobs, supervisor's job satisfaction, availability of the supervisor to workers, and the amount of time workers spent interacting with their supervisor.

Interaction, communication, trust, and supportive behavior appear to be positively related. Causal relationships cannot be tested with the data from this study but are suggested by the results. When supervisors interact with workers and are available to workers, communication increases which, in turn, promotes accurate perceptions of expectations and ultimately fosters trust. This interactive, trusting relationship leads to more supportive behaviors on the part of supervisors. While this is only speculative, communication, trust, and supportive behaviors seem to go together consistently.

Supervisory Behavior

Analyses indicate that supportive supervisory behavior is associated not only with supervisory effectiveness but with other factors often thought to be desirable in a working

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situation. Supportive supervisory behavior was found to be associated with positive personal characteristics such as being fair and adaptable. Consistent with casual analyses performed by Greene (1975), supportive supervisory behavior was also associated with greater job satisfaction on the part of workers. Demanding behavior, on the other hand, was associated with negative characteristics of the supervisor, lower worker job satisfaction, and, in some instances, ineffectiveness.

As stated earlier, there is an indication that the amount of interaction between supervisors and workers is positively related to the level of supportive behavior from supervisors and negatively related to their level of demanding behaviors. It was also found that characteristics of workers' jobs were associated with supervisory behavior. The job characteristics most related to supportive behavior included having the supervisor available, having independence in work, and being able to do the job uninterrupted from start to finish. Worker job characteristics most related to demanding behavior included membership in a larger group being supervised, performing dangerous work, and working in a variety of locations. One might speculate that work environments in which the supervisors and workers have greater opportunities to interact reduce the supervisors' need to exert demanding control over workers and increase their inclination to allow workers independence and provide them with support when needed.

Conclusions

Several general concepts run through this discussion. First, communication between supervisors and relevant others is important. Supervisors who interact more with their bosses and workers have a better understanding of their expectations. However, there seem to be a number of contextual variables (such as nature of the task and span of control) which affect the level of supervisory interaction with these groups. Therefore, supervisors should be aware of the importance of communication and foster its openness, especially when the environment limits interaction.

Secondly, the importance of trust was delineated. Worker trust, strongly associated with supervisory effectiveness, was also related to supervisors' tendency toward supportive behavior and interaction with others. The relationship between trust and positive personality characteristics of the supervisor leads to speculation that while some trust-promoting behaviors are amenable to training, others may be mediated by inherent qualities in the individual, qualities difficult to "learn." While identification of traits has not proven very useful in predicting leader effectiveness in the past (Stogdill, 1974), it may be worthwhile to reopen this line of research, looking at the relationship between traits and important aspects of supervisory performance such as the development of trust in subordinates.

Third, inaccurate perceptions of expectations by supervisors and conflicting demands from workers and bosses are associated with a variety of negative outcomes for the supervisor. They also result in negative outcomes for the worker (e.g., more demanding supervisory behavior) and for the organization (lower supervisory effectiveness).

All of these conclusions focus on positive interactions and their outcomes. Accurate and frequent communication between levels, supervisory availability, trusting relationships, supportive supervisory behaviors, job satisfaction among workers and supervisors, and supervisory effectiveness seem to occur at the same time. Their importance appears obvious, but it became apparent in the interviews with workers and supervisors that not everyone has the same "common sense." The importance of these factors should not be ignored or assumed as common knowledge in future attempts to improve supervisory effectiveness and overall organizational functioning.

RECOMMENDATIONS

A number of recommendations were formulated in accordance with the findings from this study. These recommendations were suggested by the questionnaire results or were formulated from the interviews with department heads or supervisors. In addition to the recommendations, the authors have made suggestions concerning the most appropriate audience for each recommendation. Target audience codes appear in parentheses after each recommendation. The letters "HQ" stand for headquarters-level organizations such as Naval Facilities Engineering Command and Chief of Naval Operations. The letter "M" stands for managerial levels above the first-line supervisor, including second-line supervisors, managers further up the chain of command within PWC, or managers outside the field activity. Deciding which managerial level should respond to each recommendation should be made by managers within PWC. The letter "S" stands for recommendations directed at the first-line supervisors. Recommendations are organized into categories consistent with those in the results section. Some recommendations appear in more than one section. This was done so that anyone interested in any given section would have the full benefit of all recommendations in that area.

Inaccurate Expectations

1. Supervisors must be aware of the need to communicate and interact with their bosses and their workers. This interacting can be work-related or informal socializing. Communication above and beyond that needed to assign work is indicated. (S,M)

2. Supervisors who oversee more routine jobs need to be sensitive to the need for communication with workers. Routine jobs often do not require much communication between supervisors and workers and consequently the need to communicate with workers is overlooked. Additional efforts must be made to communicate with such workers so that they may voice their expectations of supervisors. (S)

3. Supervisors need to provide opportunities for their workers to talk and should be open-minded listeners to what workers have to say. A supervisor can claim to have an open door to communication while his behavior discourages interaction. If he conveys that he is being interrupted or if he frequently cancels meetings, he is thwarting communication. (S)

4. Attempts must be made to improve communication between supervisors, bosses, and workers. Some specific suggestions for improving communication were offered by supervisors. (S,M)

    a. Supervisors should hold regular meetings (at least monthly) with workers in order to open communication lines and keep them open. (S)

    b. Supervisors should ask for oral job status reports as well as written reports. (S)

    c. Supervisors should set aside time for interacting with subordinates (i.e., office hours). This should be a time when workers would not feel they are interrupting if they need to talk. (S)

    d. Supervisors should socialize with the members of their work group (e.g., at luncheons), but they must be careful not to form cliques or select favorites. (S)

e. Supervisors should answer workers' questions or concerns promptly. Workers depend on their supervisor for answers, and when their questions are not answered they may feel their questions were forgotten or considered unimportant. This does not foster good communication. (S)

f. Bosses should be aware of the need for more positive interaction with their supervisors. Supervisors need to be recognized and rewarded, not approached only when there is a problem. (M)

g. If bosses seem difficult to approach, supervisors should begin meetings with discussions of work group accomplishments and work up to sensitive topics of concern. (S)

h. Bosses should be responsive to supervisors and provide timely answers to their concerns. (M)

i. Managers should conduct department meetings to discuss important matters. These should include people at all levels so everyone hears the same message and has the opportunity to ask questions. This reduces the chances of rumors developing and gives people a chance to get to know one another. (M)

Conflicting Expectations

5. Bosses should increase communication with workers while taking care not to exclude supervisors. Bosses need to be aware of what the workers expect from supervisors so that they can make educated recommendations to supervisors concerning how supervisors should interact with workers. (M)

6. In addition to regular department meetings, it is recommended that bosses meet directly with workers at least twice a year. In these meetings bosses can hear concerns as well as express appreciation for the workers' good performance. Bosses can provide the workers with a sense of the organization's mission and communicate the department's goals, objectives, and progress. Supervisors may or may not be included in these meetings, but care should be taken to see that supervisors do not feel they are being bypassed. It is also important for workers to know the sources of departmental rules, regulations, and constraints and their rationale so they do not place the blame for all constraints on their immediate supervisor. (M)

7. Performance appraisal elements should be compatible across levels in order to foster cooperation. Workers, supervisors, and bosses should structure elements such that performance at each level is aimed at accomplishing overall departmental goals. (S,M)

Supportive Supervisory Behavior

8. Supervisors need to be aware that supportive behaviors are likely to result in greater effectiveness. (S,M)

9. Supervisors need knowledge of the types of supportive behaviors that are most likely to result in greater effectiveness (see Table 2). (S,M)

10. Supervisors need training in supportive behavior, for example, in how to form effective interpersonal relationships, how to praise, how to communicate, how to write (so they can recommend workers for awards), and how to resolve conflicts. (M)

11.   Inclusion of supportive supervisory behaviors as elements in supervisors' per-formance appraisals should be considered. Frequently, only work completion deadlines are included.   The interpersonal behaviors relevant to effective supervision should also be included as elements in supervisors' Basic Performance Appraisal Programs (BPAPs). Satisfactory completion of these interpersonal elements could be evaluated in part by informally obtaining feedback from workers. (M)

Demanding Supervisory Behavior

12.   Supervisors need to be aware of the demanding behaviors that are not conducive to effectiveness (see Table 2). (S,M)

13.   Supervisors need to have an accurate picture of what their bosses expect in terms of demanding behaviors. Generally, supervisors believe their bosses expect them to use more demanding behaviors than bosses actually expect from supervisors. (S)

Trust and Loyalty

14.   Supervisors at all levels need to be aware of the importance of developing and maintaining trust and loyalty among subordinates. (S,M)

15.   Trust and loyalty between superiors and subordinates at all levels should be encouraged. Specific suggestions to supervisors for promoting trust and loyalty include: (S,M)

a.   Trust subordinates and subordinates will be more likely to trust superiors in return.

b.   Be consistent.

c.   Be fair.

d.   Be honest.

e.   Set an example. For instance, if workers are expected to arrive on time, bosses and supervisors should too.

f.   Be dependable and carry out promises.

g.   Be sincere--care about subordinates as people as well as workers.

h.   Assume group responsibility for mistakes rather than looking to place blame. Supervisors should include themselves as members of the work group.

i.   Give competent advice or admit not knowing the answer.

j.   Back up workers, especially when they have made mistakes.

k.   Answer questions and concerns from subordinates in a timely manner. Do not forget about questions if workers fail to raise these topics again.

l.   Reward good work.

m. Admit mistakes.

n. Be a good listener.

o. Let people know the sources of rules, regulations, and constraints.

p. Be available to workers to answer questions and solve problems.

q. Take time to talk with workers either about work or non-work topics.

r. Those who supervise <u>routine</u> jobs need to exert greater effort to demonstrate concern and build trust among subordinates.

16. <u>Future research</u> should be directed to understanding the dynamics of developing and maintaining trust and loyalty between superiors and subordinates. There is little available information about these processes, yet the present study indicates they are extremely important to effective supervision. (HQ)

Personal Characteristics of Supervisors

17. If supervisory <u>selection tools</u> are planned for development, it would be advantageous to include personal characteristics as job elements for supervisor selection. (HQ)

Job Characteristics

18. Supervisors need to be <u>aware</u> of the importance of being available. (S,M)

19. Supervisors need to be <u>available</u> at a specific time and place where work group leaders can locate them. This is especially important for supervisors who have work groups which are geographically dispersed. (S)

20. Specific suggestions for <u>increasing availability</u> are: (S)

a. Be in the office frequently or leave word where one can be reached.

b. Be available at home for emergencies that occur at work (left to the discretion of each individual supervisor).

c. Wear a signal communication device (a beeper).

d. Visit the job site. This requires that supervisors work with their bosses to determine priorities so that time can be freed for regular visits to the job site.

e. Have an open, receptive attitude to workers' attempts to communicate. Supervisors must demonstrate that they are interested in and open to workers' questions, problems, and concerns.

f. Be near a phone whenever possible and ensure that workers have numbers where the supervisor can be reached.

21. <u>Blue and white collar</u> supervisors need <u>not</u> be trained differently in interpersonal supervisory skills. (M,HQ)

Job Satisfaction

22. Bosses and supervisors need to work together to <u>clarify job responsibilities</u> and prioritize workload for first-line supervisors and workers. (S,M)

23. Both bosses and supervisors need to <u>encourage trust and loyalty</u> from subordinates. (S,M)

24. Bosses and supervisors need to <u>spend more time interacting</u>, either talking about work or socializing informally. (S,M)

25. Supervisors should engage in <u>more supportive behaviors</u> and should work to promote a supportive, cooperative work group atmosphere (e.g., take time to resolve conflicts in the work group). (S)

General Recommendations

26. Supervisors need to be made <u>aware of the results</u> of this study and its recommendations. Awareness is the necessary first step toward improvement. (M)

27. The <u>availability of supervisory training</u> in the areas of interpersonal skills, writing skills, and effective management practices should be increased. (M,HQ)

28. <u>Methods</u> should be developed to encourage behaviors and attitudes conducive to <u>building trust and loyalty</u>. (M,HQ)

29. <u>Methods</u> should be developed to <u>teach supervisors</u> how to use the most effective supervisory techniques (e.g., supervisors may need training in methods for resolving conflicts). (M,HQ)

30. Any <u>programmatic efforts</u> undertaken to improve supervisory effectiveness should be <u>carefully evaluated</u> in order to determine the most useful approaches. (M,HQ)

31. A <u>generalizability study</u> should be conducted to assess the applicability of the preceding recommendations to organizations outside the PWC community (Atwater & White, 1984b). (HQ)

Table 1

Summary of Questionnaire

	Questionnaire Section	Adapted From	Number of Items	Forms in Which These Items Were Included	Content Examined
1.	Supervisory Behavior and Expectations	Leader Behavior Description Questionnaire (Stogdill & Coons, 1957) Preliminary interviews conducted at PWC test sites	46	All	First line supervisor's behavior, bosses' & workers' expectations of first-line supervisor's behavior; supervisor's perceptions of bosses' and workers' expectations
2.	Trust	Graen and Schiemann (1978) James and Jones (1980) Literature review	7	Supervisor Worker	Trust in one's immediate supervisor
3.	Loyalty	Literature review	4	Supervisor Worker	Loyalty to one's immediate supervisor
4.	Similarity	Young, Riedel, and Sheposh (1979) Literature review	6	Supervisor Worker	Perceived similarity to one's immediate supervisor
5.	Work Group Climate	Seashore (1954) Jones and James (1979)	24	Worker	Workers' perceptions of their work group climate
6.	Personal Characteristics	Stogdill and Jaynes (1953) Osgood, Suci, and Tannenbaum (1957)	16	Worker	Workers' perceptions of first-line supervisor's personal characteristics
7.	Supervisory Effectiveness	Stogdill and Coons (1957)	10	Boss Worker	First-line supervisor's effectiveness
8.	Role Stress/ Job Overload/ Ambiguity	Rizzo, House, and Lirtzman (1970) Quinn and Staines (1979) Caplan, Cobb, French, Van Harrison, and Pinneau (1975)	10	Supervisor Worker	Self-reports of supervisors' and workers' levels of job ambiguity and overload
9.	Satisfaction	Franklin (1980) Young, Riedel, and Sheposh (1979)	10	Supervisor Worker	Self-report of supervisors' and workers' levels of job satisfaction
10.	Job Characteristics	Hackman and Lawler (1971) Literature review	27	Worker	Workers' reports of characteristics of their jobs
11.	Frequency of Interaction	Literature review	4	Worker Supervisor	Frequency of interaction with one's immediate supervisor
12.	Supervisors' Rating Form	Jones and James (1979) Literature review	1	Boss	Evaluation of first-line supervisor's performance relative to that of other first-line supervisors in the department
13.	Demographics/ Biographics	Past knowledge of PWCs and professional experience	9	All	Respondent's self-reports

Table 2

Correlations Between All Supervisory Behaviors and Effectiveness Ratings

Quest Item No.	Supervisory Behaviors	Overall Supervisory Effectiveness (EFF)
	High Positive Relationship	
3	Is easy to understand	.63**
36	Inspires loyalty in workers	.62**
40	Is able to resolve conflicts	.62**
45	Maintains good relations within the Public Works Center	.60**
34	Gets cooperation from workers	.59**
5	Stands up for workers	.56**
13	Carefully plans work in advance	.56**
41	Sees workers have materials	.54**
27	Offers ways to solve problems	.54**
	Positive Relationship	
24	Is understanding of workers' personal problems	.50**
44	Maintains safe working conditions	.50**
46	Supports opportunities for worker improvement	.48**
15	Is friendly and easy to talk to	.47**
42	Emphasizes quality over amount	.47**
11	Explains to workers what he does	.46**
43	Has good knowledge of PWC system	.46**
8	Keeps workers in good standing	.45**
38	Takes on responsibilities without complaining	.44**
33	Stresses importance of high morale	.43**
20	Is usually eager to try ideas	.41**
31	Stresses importance of meeting deadlines	.41**
9	Does little things	.40**
26	Sees workers work up to their limits	.39**
2	Lets workers know when they have done a good job	.38**
7	Accepts suggestions for changes	.38**
35	Talks to boss about how things are going	.32*
21	Criticizes poor work	.24*
39	Allows workers freedom in work	.23*
23	Asks for extra work for the good of the department	.22*
	No Relationships	
10	Does not hesitate to let workers know mistakes	.18
16	Follows orders even if workers don't approve	.18
28	Insists on being informed of workers' decisions	.17
22	Demands a lot from workers	.08
14	Demands a lot of respect	.07
17	Wants to be liked by workers	.06
30	Decides in detail what workers will do	.05
25	Insists workers follow standard ways of doing things	.00
29	Pushes workers to work harder	.03
37	Asks for help from boss	.03
18	Disciplines harshly	-.08
6	Requires things done his way	-.05
	Negative Relationship	
4	Corrects workers' mistakes in front of others	-.27*
32	Emphasizes amount over quality	-.27*
1	Is reluctant to give in	-.20*
12	Does things without asking workers first	-.20*
19	Assigns his responsibilities to workers	-.19*

Note. Item numbers correspond to questions found in the first sections of Appendices A, B, and C.

*p < .05.
**p < .001.

Table 3

Summary of One-way Analyses of Variance Between Bosses'
Actual Expectations and Supervisors' Perceptions of
Bosses' Expectations

Quest Item No.	Questionnaire Item Content (Expectation or Perceived Expectation)	Boss Actual Exp $\overline{X}$ or Average	Supv Perc of Bosses' Exp $\overline{X}$ or Average	F
1	Should be reluctant to give in	2.93	3.26	8.10*
2	Should let workers know when they've done a good job	4.53	4.10	20.94*
3	Should be easy to understand	4.67	4.39	9.78*
4	Should correct workers' mistakes in front of others	1.36	1.72	10.52*
5	Should stand up for workers	3.40	2.91	11.70*
6	Should require things done his way	3.01	3.32	5.92*
7	Should accept suggestions for changes	3.92	3.33	28.00*
8	Should keep workers in good standing	3.91	3.92	0.02
9	Should do little things	3.39	3.12	2.99
10	Should not hesitate to let workers know mistakes	3.97	4.05	0.43
11	Should explain to workers what he does	3.69	3.33	6.79*
12	Should do things without asking workers first	3.01	3.46	10.03*
13	Should plan work in advance	4.44	4.24	3.06
14	Should demand a lot of respect	3.19	3.80	14.81*
15	Should be friendly and easy to talk to	4.23	3.87	11.18*
16	Should follow orders even if workers don't approve	3.96	4.39	16.19*
17	Should want to be liked by workers	3.22	2.99	2.81
18	Should discipline harshly	2.50	3.32	30.84*
19	Should assign his responsibilities to workers to get things done	3.20	3.44	2.30
20	Should usually be eager to try new ideas	3.82	3.61	2.71
21	Should criticize poor work	3.22	3.35	0.56
22	Should demand a lot from workers	3.61	3.85	3.46
23	Should ask for extra work for good of the department	2.99	3.59	15.76*
24	Should be understanding of workers' personal problems	3.84	3.51	6.50*
25	Should insist workers follow standard ways	3.09	3.66	21.38*
26	Should see workers work up to their limits	4.07	4.02	0.22
27	Should offer ways to solve problems	3.86	3.63	3.09
28	Should insist on being informed of workers' decisions	3.67	3.88	1.96
29	Should push workers to work harder	3.13	3.52	9.46*
30	Should decide in detail what workers will do	3.12	3.69	14.28*
31	Should stress importance of meeting deadlines	4.43	4.43	0.00
32	Should emphasize amount over quality	2.26	2.59	4.76*
33	Should stress importance of high morale	3.99	3.54	9.35*
34	Should get cooperation from workers	4.43	4.04	10.84*
35	Should talk to boss about how things are going	4.20	4.01	2.40
36	Should inspire loyalty in workers	4.08	3.85	3.55
37	Should frequently ask for help from boss	2.51	3.09	20.02*
38	Should take on responsibilities without complaining	3.94	4.25	9.06*
39	Should allow workers freedom in work	3.71	3.20	14.56*
40	Should be able to resolve conflicts	4.34	4.11	5.69*
41	Should see workers have materials	4.65	4.22	15.15*
42	Should emphasize quality over amount	3.95	3.76	1.89
43	Should have good knowledge of PWC system	4.34	4.34	0.00
44	Should maintain safe working conditions	4.80	4.53	7.60*
45	Should maintain good relations within the PWC	4.56	4.26	9.02*
46	Should support opportunities for worker improvement	4.68	3.92	49.47*

Note. Item numbers correspond to questions found in the first sections of Appendices A, B, and C.

*Significantly different ($p < .05$).

Table 4

Summary of One-way Analyses of Variance Between Workers'
Actual Expectations and Supervisors' Perceptions of
Workers' Expectations

Quest Item No.	Questionnaire Item Content (Expectation or Perceived Expectation)	Workers' Actual Exp $\overline{X}$ or Average	Supv Perc of Workers' Exp $\overline{X}$ or Average	$\underline{F}$
1	Should be reluctant to give in	2.80	2.84	0.10
2	Should let workers know when they've done a good job	3.83	4.35	14.67*
3	Should be easy to understand	4.01	4.44	12.74*
4	Should correct workers' mistakes in front of others	1.94	1.34	17.74*
5	Should stand up for workers	3.85	4.38	14.33*
6	Should require things done his way	3.00	3.00	0.00
7	Should accept suggestions for changes	3.49	3.93	13.96*
8	Should keep workers in good standing	3.68	3.89	2.31
9	Should do little things	3.61	3.80	1.84
10	Should not hesitate to let workers know mistakes	3.59	3.37	2.44
11	Should explain to workers what he does	3.44	3.65	1.98
12	Should do things without asking workers first	2.87	2.73	0.81
13	Should plan work in advance	3.87	3.88	0.00
14	Should demand a lot of respect	3.18	3.33	1.00
15	Should be friendly and easy to talk to	3.99	4.21	3.10
16	Should follow orders even if workers don't approve	3.60	2.98	23.55*
17	Should want to be liked by workers	3.31	3.47	1.26
18	Should discipline harshly	2.67	2.26	9.18*
19	Should assign his responsibilities to workers to get things done	2.88	2.80	0.20
20	Should usually be eager to try new ideas	3.57	3.44	1.10
21	Should criticize poor work	3.33	2.56	24.78*
22	Should demand a lot from workers	3.50	3.05	14.60*
23	Should ask for extra work for good of the department	3.26	2.71	16.68*
24	Should be understanding of workers' personal problems	3.50	3.96	11.37*
25	Should insist workers follow standard ways	3.18	3.04	1.15
26	Should see workers work up to their limits	3.53	3.21	6.56*
27	Should offer ways to solve problems	3.85	3.83	.01
28	Should insist on being informed of workers' decisions	3.55	3.24	5.36*
29	Should push workers to work harder	2.96	2.66	6.48*
30	Should decide in detail what workers will do	2.93	3.29	6.68*
31	Should stress importance of meeting deadlines	3.83	3.57	4.15*
32	Should emphasize amount over quality	2.27	2.32	0.11
33	Should stress importance of high morale	3.88	3.92	0.09
34	Should get cooperation from workers	4.14	3.84	7.10*
35	Should talk to boss about how things are going	3.87	3.41	12.02*
36	Should inspire loyalty in workers	3.96	3.62	6.47*
37	Should frequently ask for help from boss	3.03	2.83	2.09
38	Should take on responsibilities without complaining	3.55	3.06	12.61*
39	Should allow workers freedom in work	3.72	4.01	5.07*
40	Should be able to resolve conflicts	4.08	3.87	3.27
41	Should see workers have materials	4.14	4.42	5.13*
42	Should emphasize quality over amount	4.03	3.81	2.75
43	Should have good knowledge of PWC system	4.19	4.07	0.80
44	Should maintain safe working conditions	4.27	4.30	0.09
45	Should maintain good relations within the PWC	4.09	4.00	0.53
46	Should support opportunities for worker improvement	4.23	4.42	2.40

Note. Item numbers correspond to questions found in the first sections of Appendices A, B, and C.

*Significantly different ($\underline{p}$ < .05).

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Table 5

Correlations Between Inaccuracy of Perceived
Expectations and Indicators of Effectiveness and Satisfaction

Indicators of Effectiveness and Satisfaction	Inaccuracy of Supervisors' Perceptions of Bosses' Expectations for Supportive Behavior (INACBOSSUP)[a]	Inaccuracy of Supervisors' Perceptions of Bosses' Expectations for Demanding Behavior (INACBOSDEM)	Inaccuracy of Supervisors' Perceptions of Workers' Expectations for Supportive Behavior (INACWKSUP)	Inaccuracy of Supervisors' Perceptions of Workers' Expectations for Demanding Behavior (INACWKDEM)
Bosses' ratings of supervisory effectiveness (GEAV)	.00	−.24*	−.06	.08
Workers' ratings of supervisory effectiveness (WSRAV)	−.10	.10	−.08	.02
Supervisor satisfaction with boss (SSAT1)	−.53*	−.29*	.00	.02
Supervisor satisfaction with job and co-workers (SSAT2)	.00	.00	−.17*	−.02
Supervisor satisfaction with pay (SSAT3)	.16	.04	−.18*	.01

[a]This measure of inaccuracy was created by averaging the differences between bosses' actual expectations and supervisors' perceptions of bosses' expectations across the 25 supportive behavior items. The absolute value of that average difference was used. The other three indices were created similarly.

*$p < .05$.

Table 6

Areas Where Supervisors Had Most Inaccurate Perceptions
of Bosses' Expectations

| | | Averages | | |
| | | Boss' Actual Exp | Supv Perc Exp | Dif |
Item No.	Item Content			
<u>Supportive Behaviors</u>				
46	Should support opportunities for worker improvement	4.68	3.92	.76
7	Should accept suggestions for changes made by workers	3.92	3.33	.59
<u>Demanding Behaviors</u>				
18	Should discipline harshly	2.50	3.32	-.82
14	Should demand a lot of respect	3.19	3.80	-.61
23	Should ask for extra work from workers for the good of the department	2.99	3.59	-.60
25	Should insist workers follow standard ways	3.09	3.66	-.57

<u>Note.</u> Scale on all items:
    5 = To a very great extent
    1 = Not at all

Table 7

Areas Where Supervisors Had Most Inaccurate Perceptions of <u>Workers'</u> Expectations

Item No.	Item Content	Averages		
		Worker Actual Exp	Supv Perc Exp	Dif
<u>Supportive Behaviors</u>				
5	Should stand up for workers	3.85	4.38	-.53
2	Should let workers know when they've done a good job	3.83	4.35	-.52
7	Should accept suggestions for changes	3.49	3.93	-.44
<u>Demanding Behaviors</u>				
4	Should correct workers' mistakes in front of others	1.94	1.34	.60
21	Should criticize poor work	3.33	2.56	.57
23	Should ask for extra work for the good of the department	3.26	2.71	.55

<u>Note.</u> Scale on all items:
   5 = To a very great extent
   1 = Not at all

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Table 8

Correlations Between Degree of Accuracy of Supervisors' Perceptions of Expectations and Potentially Influential Factors

Factors	Supv Accuracy of Perc of Boss Exps All Behaviors (ALBOSEXP)[a]	Supv Accuracy of Perc of Worker Exps All Behaviors (ALWKEXP)
More time supervisor spends (STIME) interacting with boss	.24*	ns
More time workers spend (WTIME) interacting with supervisor	ns	.16(p=.056)
Routineness of job (JCROUTN)	ns	-.30*
Outdoor, physically active work (JCBLWH)	ns	-.17*
Greater number of people supervised (SPANSUP)	.17*	ns

Note. A negative correlation indicates that the factor is related to inaccurate perceptions.

[a]This index of inaccuracy was computed by averaging differences between boss' actual expectations for supervisory behavior and supervisors' perceptions of boss' expectations across all 46 behaviors. The absolute value of this overall difference was used in calculations.

*p < .05.

Table 9

Summary of One-way Analyses of Variance Between Bosses' and Workers'
Actual Expectations of Supervisors

Quest Item No.	Questionnaire Item Content	Worker Actual Expect $\bar{X}$ or Average	Boss Actual Expect $\bar{X}$ or Average	F
1	Should be reluctant to give in	2.80	2.93	1.34
2	Should let workers know when they've done a good job	3.83	4.53	32.18*
3	Should be easy to understand	4.01	4.67	31.53*
4	Should correct workers' mistakes in front of others	1.94	1.36	20.36*
5	Should stand up for workers even if it makes him unpopular	3.85	3.40	9.03*
6	Should require things done his way	3.00	3.01	0.01
7	Should accept suggestions for changes	3.49	3.92	13.65*
8	Should keep workers in good standing	3.68	3.91	2.65
9	Should do little things	3.61	3.39	2.11
10	Should not hesitate to let workers know mistakes	3.59	3.97	7.67*
11	Should explain to workers what he does	3.44	3.69	3.38
12	Should do things without asking workers first	2.87	3.01	1.18
13	Should plan work in advance	3.87	4.44	23.10*
14	Should demand a lot of respect	3.18	3.19	0.00
15	Should be friendly and easy to talk to	3.99	4.23	4.46*
16	Should follow orders even if workers don't approve	3.60	3.96	8.60*
17	Should want to be liked by workers	3.31	3.22	0.47
18	Should discipline harshly	2.67	2.50	1.55
19	Should assign his responsibilities to workers to get things done	2.88	3.20	3.70
20	Should usually be eager to try new ideas	3.57	3.82	4.17*
21	Should criticize poor work	3.33	3.22	0.48
22	Should demand a lot from workers	3.50	3.61	0.79
23	Should ask for extra work for good of the department	3.26	2.99	3.23
24	Should be understanding of workers' personal problems	3.50	3.84	5.80*
25	Should insist workers follow standard ways	3.18	3.09	0.46
26	Should see workers work up to their limits	3.53	4.07	19.45*
27	Should offer ways to solve problems	3.85	3.86	0.01
28	Should insist on being informed of workers' decisions	3.55	3.67	0.79
29	Should push workers to work harder	2.96	3.13	2.56
30	Should decide in detail what workers will do	2.93	3.12	1.71
31	Should stress importance of meeting deadlines	3.83	4.43	24.74*
32	Should emphasize amount over quality	2.27	2.26	0.01
33	Should stress importance of high morale	3.88	3.99	0.62
34	Should get cooperation from workers	4.14	4.43	6.79*
35	Should talk to boss about how things are going	3.87	4.20	7.48*
36	Should inspire loyalty in workers	3.96	4.08	1.07
37	Should frequently ask for help from boss	3.03	2.51	15.82*
38	Should take on responsibilities without complaining	3.55	3.94	10.38*
39	Should allow workers freedom in work	3.72	3.71	0.01
40	Should be able to resolve conflicts	4.08	4.34	6.50*
41	Should see workers have materials	4.14	4.65	22.51*
42	Should emphasize quality over amount	4.03	3.95	0.32
43	Should have good knowledge of PWC system	4.19	4.34	1.45
44	Should maintain safe working conditions	4.27	4.80	25.01*
45	Should maintain good relations within the PWC	4.09	4.56	18.32*
46	Should support opportunities for worker improvement	4.23	4.68	17.94*

*Significantly different (p < .05).

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Table 10

Correlations Between the Degree of Conflict Between Bosses' and
Workers' Expectations and Indicators of Supervisory Effectiveness,
Satisfaction, and Job Pressures

Indicators	Degree of Conflict Between Boss and Worker Expectations[a] r
Workers' Ratings of Supervisory Effectiveness in 9 areas:	
Technical competence	-.08
Getting along with his boss	.15
Giving directions clearly and when needed	-.04
Performing under pressure	-.04
Dependability	-.12
Cooperating with other supervisors to get the job done	-.05
Administrative competence	-.13
Getting along with the people who work for him	-.05
Encouraging workers to do a good job	.06
Boss' Ratings of Supervisory Effectiveness in 9 areas:	
Technical competence	.01
Getting along with his boss	-.13
Giving directions clearly and when needed	-.10
Performing under pressure	-.17*
Dependability	-.10
Cooperating with other supervisors to get the job done	-.13
Administrative competence	-.04
Getting along with the people who work for him	-.10
Getting or encouraging workers to do a good job	-.02
Supervisor Satisfaction	
Supervisor satisfaction with boss	.06
Supervisor satisfaction with job and co-workers	-.06
Supervisor satisfaction with pay	-.29*
Supervisor Ambiguity/Overload	
Supervisor job ambiguity	.20*
Supervisor job overload	.10

[a]An index of conflict between boss' and workers' expectations was computed by
subtracting workers' expectations from boss' expectations, summing these differences
across the 46 items and taking the absolute value.

Table 11

Significant Correlations Between Job Characteristics and Supervisory Effectiveness

Item No.	Job Characteristics	Effectiveness Ratings (EFF) r
WJC18	Your supervisor is available to answer questions either in person or by telephone	.51*
WJC8	Job gives you opportunity for independence	.22*
WJC15	Frequency of receiving instructions from your supervisor	-.23*

*$p < .05$.

Table 12

Breakdown of Averaged Responses to Supervisor Availability
by Department Across PWC Locations

Department	Number of Supv Respondents	Number of Worker Respondents	Average Rating [a,b] of Supv Availability
400 (Maint Eng)	12	24	4.2
500 (Maintenance)	33	66	3.2
600 (Utilities)	17	34	3.6
700 (Transportation)	12	24	3.8
800 (Material)	6	12	3.3

[a]Two workers' responses were averaged to create an availability score for each supervisor.

[b]3= Occasionally available, 4 = Frequently available.

Table 13

Correlations Between Supervisory Effectiveness
and Number of Workers Supervised

Indicators of Supervisory Effectiveness	Number of Workers Supervised
Overall effectiveness (EFF)	.07
Incidence of supportive supervisory behaviors (SUPBEHAV)	.01
Incidence of demanding supervisory behaviors (DEMBEHAV)	.30*
Worker satisfaction with supervisor (WSAT1)	-.04
Worker satisfaction with job and co-workers (WSAT2)	-.11
Worker satisfaction with pay (WSAT3)	-.18*
Supervisor satisfaction with boss (SSAT1)	.18*
Supervisor satisfaction with job and co-workers (SSAT2)	.01
Supervisor satisfaction with pay (SSAT3)	.04
Worker job ambiguity (WRA)	-.02
Worker job overload (WROV)	-.10
Supervisor job ambiguity (SRA)	.23*
Supervisor job overload (SROV)	-.01
Time supervisor and boss spend interacting (STIME)	.24*
Time workers spend interacting with supervisor (WTIME)	-.07
Closeness of supervision (JCSUPV)	-.30*
Worker trust in supervisor (WKTRUST)	-.15
Worker loyalty to supervisor (WKLOYAL)	-.05
Supervisor trust in boss (SUPTRUST)	.21*
Supervisor loyalty to boss (SUPLOYAL)	.23*

*$p < .05$.

Table 14

Correlations Between Satisfaction and Indicators of Effectiveness

Indicators of Satisfaction	Supervisory Effectiveness (EFF)	Work Group Cooperation/ Morale (WKGP1)	Work Group Performance (WKGP2)
Worker satisfaction with supervisor (WSAT1)	.66*	.34*	.19*
Worker satisfaction with job and co-workers (WSAT2)	.29*	.42*	.39*
Worker satisfaction with pay (WSAT3)	.15	.18*	.23*
Supervisor satisfaction with boss (SSAT1)	.32*	.14	.20*
Supervisor satisfaction with job and co-workers (SSAT2)	.20*	.23*	.18*
Supervisor satisfaction with pay (SSAT3)	-.07	-.09	-.15

*$p < .05$.

Table 15

Discriminant Analysis Between Most Effective and
Least Effective Supervisors

Variable	Averages for Most Eff Supv	Averages for Least Eff Supv	Standardized Discriminant Function Coefficient
Worker trust in supervisor (WKTRUST)	4.3	2.3	.81*
Negative personal characteristics of supervisor (PERSN2)	2.5	3.3	-.71*
Availability of supervisor (JC18)	3.3	2.5	.53*
Supervisor trust in boss (SUPTRUST)	3.5	2.9	.53*

Note. Canonical correlation for function = .87.

*$p < .05$.

Table 16

Relationships Between Personal Characteristics and Supervisory Effectiveness

	Positive (and Negative) Personal Characteristics	Supervisory Effectiveness (EFF) r
WA1	Adaptable (Inflexible)	.49*
WA2	Passive (Aggressive)	.23*
WA3	Friendly (Unfriendly)	.42*
WA4	Self-confident (Insecure)	.51*
WA5	Cooperative (Uncooperative)	.41*
WA6	Sociable (Unsociable)	.29*
WA7	Mellow (Harsh)	.09
WA8	Soft-spoken (Loud)	.26*
WA9	Honest (Dishonest)	.47*
WA10	Strict (Easy)	.12
WA11	Kind (Unkind)	.34*
WA12	Fair (Unfair)	.50*
WA13	Relaxed (Tense)	.45*
WA14	Strong (Weak)	.47*
WA15	Ambitious (Lazy)	.42*
WA16	Forgiving (Unforgiving)	.32*

*$p < .05$.

Table 17

Correlations Between Job Characteristics and Supervisory Behavior

Item No.	Item Content	Supportive Behavior	Demanding Behavior
WJC6	Do a job from start to finish	.27*	
WJC8	Job gives you independence and freedom	.35*	
WJC11	Exposed to noise on your job		.21*
WJC15	Frequently receive instruction from your supervisor	-.29*	
WJC17	Supervisor is nearby		-.23*
WJC18	Supervisor is available	.42*	
WJC20	Job requires a great deal of physical activity		.24*
WJC24	Job can be dangerous		.32*
WJC27	You work in a variety of locations in a year		.21*

*$p < .05$.

Table 18

Correlations Between Worker Satisfaction and Supervisory Behavior

Item No.	Item Content	Supportive or Demanding Behavior	Worker Sat w/Supv	Worker Sat w/Job and Co-workers	Worker Sat w/Pay
1	Is reluctant to give in	D	-.35*	-.30*	-.04
2	Lets workers know when they've done a good job	S	.45*	.28*	.23*
3	Is easy to understand	S	.44*	.22*	.16
4	Corrects workers' mistakes in front of others	D	-.30*	-.20*	-.22*
5	Stands up for workers even if it makes him unpopular with his boss	S	.55*	.24*	.20*
6	Requires things done his way	D	-.28*	-.14	-.16
7	Accepts suggestions for changes	S	.39*	.04	.11
8	Keeps workers in good standing	S	.39*	.13	.18*
9	Does little things	S	.38*	.14	.09
10	Does not hesitate to let workers know mistakes	D	-.22*	-.13	-.18*
11	Explains to workers what he does	S	.43*	.21*	.18*
12	Does things without asking workers first		-.09	-.07	-.05
13	Plans work in advance	S	.35*	.18*	.25*
14	Demands a lot of respect	D	-.16	-.12	-.07
15	Is friendly and easy to talk to	S	.44*	.13	.17*
16	Follows orders even if workers don't approve		-.05	-.13	-.04
17	Wants to be liked by workers		.16	.04	.04
18	Disciplines harshly	D	-.21*	-.15	-.03
19	Assigns responsibilities to workers		-.12	-.25*	-.07
20	Is usually eager to try ideas	S	.35*	.20*	.23*
21	Criticizes poor work	D	.07	.04	-.12
22	Demands a lot from workers	D	-.09	-.05	-.09
23	Asks for extra work for the good of the department	D	.08	-.16	-.10
24	Is understanding of workers' personal problems	S	.43*	.24*	.10
25	Insists workers follow standard ways	D	-.25*	-.16	-.14
26	Sees workers work up to their limits		.15	.09	.06
27	Offers ways to solve problems	S	.35*	.20*	.14
28	Insists on being informed of workers' decisions	D	.08	.00	-.01
29	Pushes workers to work harder	D	-.13	-.17*	-.17*
30	Decides in detail what workers will do	D	-.11	-.12	-.04
31	Stresses importance of meeting deadlines	D	.16	.07	.07
32	Emphasizes amount over quality	D	-.23*	-.31*	-.06
33	Stresses importance of high morale	S	.42*	.16	.22*
34	Gets cooperation from workers	S	.53*	.35*	.36*
35	Talks to boss about how things are going		.13	.02	.02
36	Inspires loyalty in workers	S	.60*	.22*	.28*
37	Frequently asks for help from boss		-.13	-.03	-.05
38	Takes on responsibilities without complaining	S	.30*	.10	.21*
39	Allows workers freedom in work	S	.29*	.24*	.09
40	Is able to resolve conflicts	S	.52*	.30*	.14
41	Sees workers have materials	S	.41*	.24*	.18*
42	Emphasizes quality over amount	S	.38*	.31*	.25*
43	Has good knowledge of PWC system	S	.30*	.10	.11
44	Maintains safe working conditions	S	.38*	.19*	.12
45	Maintains good relations within the PWC	S	.42*	.12	.19*
46	Supports opportunities for worker improvement	S	.49*	.20*	.13

*$p < .05$.

Table 19

Workers' Job Satisfaction by Department Across PWCs
(Average)

Dept.	N^a	People with whom you work	Opportunities to develop skills	Pay you receive	Directions you get from your supervisor	Respect you get from people with whom you work	Treatment from supervisor	Pay you receive for performance	Recognition you get for good job	Supervisor in general	Job in general
100	2	3.5	3.0	3.5	3.5	2.0	4.5	2.5	4.5	4.5	3.0
101	4	4.5	3.8	3.5	4.0	4.3	4.0	3.5	3.8	4.0	4.3
102	2	5.0	4.5	4.5	4.0	5.0	4.0	3.5	3.5	4.0	4.5
105	2	3.5	2.0	3.0	3.5	4.0	4.0	3.5	3.5	4.0	4.0
140	4	3.5	4.3	3.0	3.5	3.3	4.0	2.8	3.8	4.3	4.3
150	10	4.0	3.6	3.1	2.6	4.2	3.2	3.1	2.9	2.9	4.2
160	2	3.0	2.0	2.0	2.5	3.5	3.0	2.0	2.5	3.0	3.0
200	4	4.0	3.5	2.8	4.0	4.0	4.5	3.0	3.8	4.3	3.5
300	4	4.5	3.3	4.3	3.5	4.0	3.5	4.0	2.5	4.0	4.3
350	2	3.0	2.0	3.5	3.0	4.0	2.0	2.5	1.5	3.0	4.5
400	24	4.3	3.8	3.5	3.8	4.1	4.2	3.2	3.4	3.9	4.1
500	66	3.5	3.2	3.3	3.4	3.6	3.3	3.0	3.0	3.4	3.7
600	34	3.8	2.9	3.1	2.9	3.9	3.3	3.0	3.1	3.1	3.9
700	24	4.1	3.3	3.5	3.8	3.9	3.8	3.5	3.3	3.4	3.9
800	12	3.4	2.5	2.7	2.5	3.6	2.7	2.2	2.8	2.6	3.4

Note. An average was recorded using the following scale: 5 = <u>Very satisfied</u>; 4 = <u>Satisfied</u>; 3 = <u>Neither satisfied nor dissatisfied</u>; 2 = <u>Dissatisfied</u>; 1 = <u>Very dissatisfied</u>.

[a] Number of worker respondents.

Table 20

Relationships Between Personal Characteristics of Supervisors
and Supervisory Behavior

	Behavior	
Positive (and Negative) Personal Characteristics	Supportive (SUPBEHAV) r	Demanding (DEMBEHAV) r
WA1 Adaptable (Inflexible)	.51*	-.21*
WA2 Passive (Aggressive)	.17*	.31*
WA3 Friendly (Unfriendly)	.46*	-.27*
WA4 Self-confident (Insecure)	.52*	.03
WA5 Cooperative (Uncooperative)	.44*	-.26*
WA6 Sociable (Unsociable)	.34*	-.12
WA7 Mellow (Harsh)	.15	-.44*
WA8 Soft-spoken (Loud)	.24*	-.22*
WA9 Honest (Dishonest)	.46*	-.05
WA10 Strict (Easy)	.00	.44*
WA11 Kind (Unkind)	.39*	-.16
WA12 Fair (Unfair)	.52*	-.07
WA13 Relaxed (Tense)	.44*	-.18*
WA14 Strong (Weak)	.54*	.15
WA15 Ambitious (Lazy)	.41*	.19*
WA16 Forgiving (Unforgiving)	.43*	-.18*

*p< .05.

Table 21

Relationship Between Worker <u>Trust</u> Toward Supervisor
and Supervisory Behaviors

Quest Item No.	Questionnaire Item Content	Worker Trust r
	High Positive Relationship	
5	Stands up for workers	.64**
40	Is able to resolve conflicts	.61**
36	Inspires loyalty in workers	.60**
34	Gets cooperation from workers	.57**
3	Is easy to understand	.55**
11	Explains to workers what he does	.53**
46	Supports opportunities for worker improvement	.53**
	Positive Relationship	
15	Is friendly and easy to talk to	.47**
27	Offers ways to solve problems	.47**
8	Keeps workers in good standing	.46**
41	Sees workers have materials	.45**
42	Emphasizes quality over amount	.45**
24	Is understanding of workers' personal problems	.44**
45	Maintains good relations within the PWC	.44**
7	Accepts suggestions for changes	.43**
43	Has good knowledge of PWC system	.43**
2	Lets workers know when they have done a good job	.41**
9	Does little things	.41**
33	Stresses the importance of high morale	.41**
44	Maintains safe working conditions	.39**
13	Plans work in advance	.37**
38	Takes on responsibilities without complaining	.36**
20	Is usually eager to try new ideas	.35**
39	Allows workers freedom in how they do their work	.29*
26	Sees workers work up to their limits	.21*
	No Relationship (Non-significant Correlation)	
6	Requires things to be done his way	-.17
31	Stresses importance of meeting deadlines	.15
37	Asks for help from boss	-.15
25	Insists workers follow standard ways	-.14
10	Does not hesitate to let workers know mistakes	-.11
17	Wants to be liked by workers	.11
22	Demands a lot from workers	-.09
28	Insists on being informed of workers decisions	.09
35	Talks to his boss about how things are going	.08
12	Does things without asking workers first	-.07
23	Asks for extra work for the good of the department	.07
21	Criticizes poor work	.05
30	Decides in detail what workers will do	-.05
14	Demands a lot of respect	-.04
16	Follows orders even if workers don't approve	-.03
	Negative Relationship	
1	Is reluctant to give in	-.35**
4	Corrects workers' mistakes in front of others	-.28*
32	Emphasizes amount over quality	-.28*
18	Disciplines harshly	-.22*
29	Pushes workers to work harder	-.20*
19	Assigns responsibilities to workers in order to get things done	-.19*

*$p < .05$.
**$p < .001$.

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Table 22

Relationship Between Worker <u>Loyalty</u> Toward Supervisor
and Supervisory Behaviors

Quest Item No.	Questionnaire Item Content	Worker Loyalty <u>r</u>
	High Positive Relationship	
34	Gets cooperation from workers	.61**
5	Stands up for workers	.60**
36	Inspires loyalty in workers	.59**
46	Supports opportunities for worker improvement	.59**
40	Is able to resolve conflicts	.58**
3	Is easy to understand	.52**
	Positive Relationship	
8	Keeps workers in good standing	.49**
11	Explains to workers what he does	.49**
27	Offers ways to solve problems	.49**
9	Does little things	.47**
15	Is friendly and easy to talk to	.46**
33	Stresses importance of high morale	.46**
24	Is understanding of workers' personal problems	.45**
45	Maintains good relations within the PWC	.45**
7	Accepts suggestions for changes	.43**
13	Plans work in advance	.43**
41	Sees workers have materials	.43*
42	Emphasizes quality over amount	.43*
20	Is usually eager to try new ideas	.41*
44	Maintains safe working conditions	.39*
2	Lets workers know a good job	.38*
43	Has good knowledge of PWC	.36*
39	Allows workers freedom in how they do their work	.32*
38	Takes on responsibilities without complaining	.29*
26	Sees workers work up to their limits	.24*
28	Insists on being informed of workers' decisions	.20*
31	Stresses importance of meeting deadlines	.21*
	No Relationship	
17	Wants to be liked by workers	.15
23	Asks for extra work for the good of the department	.14
35	Talks to boss about how things are going	.13
21	Criticizes poor work	.03
30	Decides in detail what worker will do	.02
25	Insists workers follow standard ways	-.17
37	Asks for help from boss	-.14
10	Does not hesitate to let workers know mistakes	-.11
16	Follows orders even if workers don't approve	-.11
22	Demands a lot from workers	-.11
29	Pushes workers to work harder	-.11
6	Requires things to be done his way	-.10
12	Does things without asking workers first	-.10
19	Assigns his responsibilities to workers in order to get things done	-.10
14	Demands a lot of respect	-.06
	Negative Relationship	
32	Emphasizes amount over quality	-.34*
1	Is reluctant to give in	-.26*
4	Corrects workers' mistakes in front of others	-.25*
18	Disciplines harshly	-.20*

*<u>p</u> < .05.
**<u>p</u> < .001.

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Table 23

Significant Correlations of Worker Trust and Loyalty with
Job Characteristics and the Personal Characteristics of the Supervisor

Characteristic	Trust r	Loyalty r
Supervisor characteristics, a nice guy (PERSN1)	.65*	.58*
Supervisor characteristics, a tough guy (PERSN2)	-.28*	-.21*
Job complexity/autonomy (JCCOMPLX)	.34*	.31*
Closeness of supervision (JCSUPV)	.50*	.41*
Average time workers spend talking with supervisors (WTIME)	.34*	.30*

*$p < .05$.

Table 24

Supervisors' Job Satisfaction by Department Across PWCs
(Average)

Dept.	No. of supv[a]	People with whom you work	Opportunities to develop skills	Pay you receive	Directions you get from your boss	Respect you get from people with whom you work	Treatment from boss	Pay you receive for performance	Recognition you get for good job	Boss in general	Job in general
101	2	3.5	4.0	4.0	4.0	3.5	4.0	4.0	3.5	3.5	3.5
140	2	4.5	3.0	3.5	2.0	5.0	2.5	3.0	2.5	2.0	4.5
150	5	4.2	3.8	3.8	3.4	4.2	4.4	3.8	3.4	4.0	4.0
200	2	5.0	4.5	4.5	3.5	4.5	4.5	4.5	3.5	4.0	5.0
300	2	4.5	3.0	3.5	3.5	4.5	3.5	3.5	3.0	3.5	4.0
400	12	4.1	3.5	3.8	3.3	4.0	3.4	3.7	3.5	3.3	3.9
500	33	4.0	3.6	3.4	3.7	3.8	3.8	3.3	3.5	3.7	3.8
600	17	4.2	3.8	3.6	3.2	4.0	3.6	3.5	3.3	3.6	4.2
700	12	3.6	3.3	3.4	3.5	3.9	3.5	3.5	3.7	3.5	4.2
800	6	3.7	3.5	2.5	3.3	3.8	3.7	2.7	3.3	3.8	3.7

Note. An average was recorded using the following scale: 5 = Very satisfied; 4 = Satisfied; 3 = Neither satisfied nor dissatisfied; 2 = Dissatisfied; 1 = Very dissatisfied.

[a] Only departments with more than one supervisor responding are presented.

Table 25

Correlations With Supervisor Satisfaction

Variables	Supervisor Satisfaction With Boss (SSAT1)	Supervisor Satisfaction With Job and Co-workers (SSAT2)	Supervisor Satisfaction With Pay (SSAT3)
Supervisor trust in boss (SUPTRUST)	.78*	ns	ns
Supervisor loyalty to boss (SUPLOYAL)	.69*	ns	ns
Supervisor clarity about job responsibilities (SRA)	.53*	ns	ns
Low supervisor overload (SROV)	.21*	ns	.39*
Supervisor spends more time interacting with boss (STIME)	.22*	ns	ns
Worker trust in supervisor (WKTRUST)	ns	.16*	ns
Work group morale (WKGP1)	ns	.23*	ns
Worker loyalty to supervisor (WKLOYAL)	ns	.21*	ns

*$p < .05$.

Table 26

Averages for Differing Expectations of Blue and White Collar Supervisors

Item No.	Item Content	White Collar Supervisors	Blue Collar Supervisors
	Supervisory Behavior	Average Worker Expectations	
4	Should correct workers' mistakes in front of others	1.69	2.20*
35	Should talk to boss about how things are going in the work area	3.61	4.03*
36	Should inspire loyalty in workers	3.72	4.10*
44	Should maintain safe working conditions	3.97	4.44*
		Average Boss Expectations	
2	Should let workers know when they have done a good job	4.69	4.44*
19	Should assign responsibilities to workers	3.56	2.98*
28	Should insist he be informed of workers' decisions	3.28	3.90*
29	Should push workers to work harder	2.89	3.27*
42	Should emphasize quality more than amount	4.22	3.79*

*Averages differ significantly ($p < .05$).

Table 27

Averages for Differing <u>Supervisory Behaviors</u> of Blue and White Collar Supervisors

	Behavior	Average Extent of Behavior	
Item No.	Item Content	White Collar Supervisors	Blue Collar Supervisors
13	Plans work in advance	3.28	3.54*
18	Disciplines harshly	2.24	2.69*
21	Criticizes poor work	2.77	3.04*
29	Pushes workers to work harder	2.80	3.04*
32	Emphasizes amount more than quality	2.26	2.56*
37	Asks for help from boss	2.63	2.91*
39	Allows workers freedom in work	3.83	3.53*
42	Emphasizes quality more than amount	3.75	3.50*

*Averages differ significantly ($p < .05$).

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APPENDIX A

QUESTIONNAIRE: BOSSES' FORM

OPINION QUESTIONNAIRE
Public Works Center

This questionnaire asks for your opinions and feelings about your work at the Public Works Center (PWC). The information you provide will be used for RESEARCH PURPOSES ONLY. No one at this PWC will ever have access to your individual answers. All responses will be kept completely confidential.

We are very interested in your opinions on all topics in this questionnaire and therefore we encourage your participation. There are no right or wrong answers to these questions, since we are interested in what you think and feel about your work.

Your cooperation in answering all the items is greatly appreciated.

Research Team
Personnel Research and Development Center
San Diego, CA 92152

Fall 1983

Privacy Act Statement

Information concerning your opinions is requested under authority of 57 USC 301 as reflected in OPNAV Notice 5450 of 17 April 1975. This information will be used by NAVPERSRANDCEN to recommend methods of enhancing Public Works Center effectiveness. The information provided will be combined with that provided by other individuals. Individual responses will not be made available to any one. You are not required to provide this information. Your participation is voluntary.

On the following items we want your opinion as to what a supervisor (foreman) below you SHOULD do in order to be a good supervisor. Answer the set of questions by circling the number below the answer that best fits your opinion. Circle only one response per item.

NOTE: The items in this questionnaire are worded with he and him instead of he/she and him/her. If the person referred to in any item is a woman, please excuse the wording and respond as if items were worded she/her.

A. To what extent SHOULD a supervisor (foreman) do the following in order to be a good supervisor?

	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
1. Be reluctant/not like to give in when his workers disagree with him.	5	4	3	2	1
2. Let his workers know when he thinks one of them has done a good job.	5	4	3	2	1
3. Be easy to understand.	5	4	3	2	1
4. Correct his workers' mistakes in front of others.	5	4	3	2	1
5. Stand up for his workers even though it may make him unpopular with his boss.	5	4	3	2	1
6. Require things to be done his way.	5	4	3	2	1
7. Accept suggestions for changes by his workers.	5	4	3	2	1
8. Keep his workers in good standing with those higher up in the Public Works Center.	5	4	3	2	1
9. Do little things to make it nice to be a member of his work group.	5	4	3	2	1
10. Not hesitate to let his workers know when they make a mistake.	5	4	3	2	1
11. Explain to his workers what he does.	5	4	3	2	1
12. Do things without first asking his workers.	5	4	3	2	1
13. Carefully plan work far enough in advance.	5	4	3	2	1
14. Demand a great deal of respect.	5	4	3	2	1

TURN OVER

A. To what extent SHOULD a supervisor do the following in order to be a good supervisor?

	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
15. Be friendly and easy to talk to.	5	4	3	2	1
16. Follow orders even if his workers don't approve.	5	4	3	2	1
17. Want to be liked by his workers.	5	4	3	2	1
18. Discipline harshly.	5	4	3	2	1
19. Assign some of his responsibilities to his workers in order to get things done.	5	4	3	2	1
20. Usually be eager to try new ideas.	5	4	3	2	1
21. Criticize poor work.	5	4	3	2	1
22. Demand a great deal from his workers.	5	4	3	2	1
23. Ask for extra work from his workers for the good of the department.	5	4	3	2	1
24. Be understanding of his workers' personal problems.	5	4	3	2	1
25. Insist that his workers follow standard ways of doing things in every detail.	5	4	3	2	1
26. See to it that the workers in his work group work up to their limits.	5	4	3	2	1
27. Offer ways to solve his workers' problems.	5	4	3	2	1
28. Insist that he be informed of decisions made by his workers.	5	4	3	2	1
29. Push his workers to work harder.	5	4	3	2	1
30. Decide in detail what his work group will do and how it will be done.	5	4	3	2	1
31. Stress the importance of meeting deadlines.	5	4	3	2	1
32. Emphasize the amount of work more than the quality of work.	5	4	3	2	1
33. Stress the importance of high morale among his workers.	5	4	3	2	1
34. Get cooperation from his workers.	5	4	3	2	1
35. Talk to his boss about how things are going in his work area.	5	4	3	2	1

GO TO NEXT PAGE

A. To what extent SHOULD a supervisor (foreman) do the following in order to be a good supervisor?

	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
36. Inspire loyalty in his workers.	5	4	3	2	1
37. Frequently ask for help from his boss.	5	4	3	2	1
38. Take on new responsibilities without complaining.	5	4	3	2	1
39. Allow his workers freedom in how they do their work.	5	4	3	2	1
40. When conflicts come up in his work group, be able to resolve them.	5	4	3	2	1
41. See to it that his workers have the materials and supplies necessary to do the job.	5	4	3	2	1
42. Emphasize the quality of work more than the amount of work.	5	4	3	2	1
43. Have a good knowledge of the Public Works Center system.	5	4	3	2	1
44. Maintain safe working conditions.	5	4	3	2	1
45. Maintain good relations within the Public Works Center.	5	4	3	2	1
46. Support opportunities for improvement for his workers (such as training, education, promotions).	5	4	3	2	1

SECTION 2

Please answer the following questions by circling the number next to the answer that best fits your opinion.

1. How important is it to your boss that you be loyal to him?

   1. Not important at all
   2. Not too important
   3. Somewhat important
   4. Important
   5. Very important

2. How important is it to you that your supervisors below you be loyal to you?

   1. Not important at all
   2. Not too important
   3. Somewhat important
   4. Important
   5. Very important

4

TURN OVER

On the following items, we want to know what each of the supervisors who work for you DO on the job. Please circle one response per item for each of the supervisors listed.

EXAMPLE QUESTION

A. To what extent DOES					B. To what extent DOES					C. To what extent DOES				
John Doe					*Jack Smith*					*Joe Brown*				
do the following?					do the following?					do the following?				
To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
1. He acts cheerful ⑤ 4 3 2 1					5 4 ③ 2 1					5 4 3 2 ①				

NOTE: Marking number (5) in part A indicates that John Doe is cheerful to a very large extent.

Marking number (3) in part B indicates that Jack Smith is cheerful to some extent.

Marking number (1) in part C indicates that Joe Brown is not at all cheerful.

| A. To what extent DOES | | | | | B. To what extent DOES | | | | | C. To what extent DOES | | | | |
| do the following? | | | | | do the following? | | | | | do the following? | | | | |
To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
1. He is reluctant/doesn't like to give in when his workers disagree with him.														
5 4 3 2 1					5 4 3 2 1					5 4 3 2 1				
2. He lets his workers know when he thinks one of them has done a good job.														
5 4 3 2 1					5 4 3 2 1					5 4 3 2 1				
3. He is easy to understand. 5 4 3 2 1					5 4 3 2 1					5 4 3 2 1				
4. He corrects his workers' mistakes in front of others. 5 4 3 2 1					5 4 3 2 1					5 4 3 2 1				

5

GO TO NEXT PAGE

A-5

	A. To what extent DOES ___ do the following?					B. To what extent DOES ___ do the following?					C. To what extent DOES ___ do the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
5. He stands up for his workers even though it may make him unpopular with his boss.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
6. He requires things to be done his way.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
7. He accepts suggestions for changes by his workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
8. He keeps his workers in good standing with those higher up in the Public Works Center.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
9. He does little things to make it nice to be a member of his work group.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
10. He doesn't hesitate to let his workers know when they make a mistake.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
11. He explains to his workers what he does.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
12. He does things without first asking his workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
13. He carefully plans work far enough in advance.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
14. He demands a great deal of respect.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
15. He is friendly and easy to talk to.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
16. He follows orders even if his workers don't approve.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
17. He wants to be liked by his workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

TURN OVER

	A. To what extent DOES do the following?					B. To what extent DOES do the following?					C. To what extent DOES do the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
18. He disciplines harshly.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
19. He assigns some of his responsibilities to his workers in order to get things done.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
20. He is usually eager to try new ideas.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
21. He criticizes poor work.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
22. He demands a great deal from his workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
23. He asks for extra work from his workers for the good of the department.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
24. He is understanding of his workers' personal problems.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
25. He insists that his workers follow standard ways of doing things in every detail.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
26. He sees to it that the workers in his work group work up to their limits.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
27. He offers ways to solve his workers' problems.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
28. He insists that he be informed of decisions made by his workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
29. He pushes his workers to work harder.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
30. He decides in detail what his workers will do and how it will be done.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

| | A. To what extent DOES | | | | | B. To what extent DOES | | | | | C. To what extent DOES | | | | |
| | do the following? | | | | | do the following? | | | | | do the following? | | | | |
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
31. He stresses the importance of meeting deadlines.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
32. He emphasizes the amount of work more than the quality of work.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
33. He stresses the importance of high morale among his workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
34. He gets cooperation from his workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
35. He talks to his boss about how things are going in his work area.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
36. He inspires loyalty in his workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
37. He asks for help from his boss.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
38. He takes on new responsibilities without complaining.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
39. He allows his workers freedom in how they do their work.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
40. When conflicts come up in his work group he is able to resolve them.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
41. He sees to it that his workers have the materials and supplies necessary to do the job.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
42. He emphasizes the quality of work more than the amount of work.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
43. Have a good knowledge of the Public Works Center System.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
44. Maintain safe working conditions.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
45. Maintain good relations within the Public Works Center.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
46. Support opportunities for improvement for his workers (such as training, education, promotions).	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

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TURN OVER

The following questionnaire deals with the supervisors who work for you. We want you to rate the effectiveness of each of them.

Please circle the number next to the answer which best fits your opinion as to how effective ___ *John Doe* ___
is in the following areas:

1. TECHNICAL COMPETENCE
    (Knowing the Job)

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

2. GETTING ALONG WITH HIS
    BOSS

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

3. GIVING DIRECTIONS CLEARLY
    AND WHEN NEEDED

    1. Very Poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

4. PERFORMING UNDER PRESSURE

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

5. DEPENDABILITY

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

6. COOPERATING WITH OTHER
    FOREMEN TO GET THE JOB DONE

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

7. ADMINISTRATIVE COMPETENCE
    (Paperwork; Office responsi-
    bilities)

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

8. GETTING ALONG WITH THE PEOPLE
    WHO WORK FOR HIM

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

9. GETTING OR ENCOURAGING WORKERS
    TO DO A GOOD JOB

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

GO TO NEXT PAGE

The following questionnaire deals with the supervisors who work for you. We want you to rate the effectiveness of each of them.

Please circle the number next to the answer which best fits your opinion as to how effective ____*Jack Smith*____ is in the following areas:

1. TECHNICAL COMPETENCE
   (Knowing the Job)

   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

2. GETTING ALONG WITH HIS BOSS

   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

3. GIVING DIRECTIONS CLEARLY AND WHEN NEEDED

   1. Very Poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

4. PERFORMING UNDER PRESSURE

   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

5. DEPENDABILITY

   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

6. COOPERATING WITH OTHER FOREMEN TO GET THE JOB DONE

   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

7. ADMINISTRATIVE COMPETENCE
   (Paperwork; Office responsibilities)

   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

8. GETTING ALONG WITH THE PEOPLE WHO WORK FOR HIM

   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

9. GETTING OR ENCOURAGING WORKERS TO DO A GOOD JOB

   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

GO TO NEXT PAGE

The following questionnaire deals with the supervisors who work for you. We want you to rate the effectiveness of each of them.

Please circle the number next to the answer which best fits your opinion as to how effective ___*Joe Brown*___
is in the following areas:

1. TECHNICAL COMPETENCE
    (Knowing the Job)

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

2. GETTING ALONG WITH HIS
    BOSS

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

3. GIVING DIRECTIONS CLEARLY
    AND WHEN NEEDED

    1. Very Poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

4. PERFORMING UNDER PRESSURE

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

5. DEPENDABILITY

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

6. COOPERATING WITH OTHER
    FOREMEN TO GET THE JOB DONE

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

7. ADMINISTRATIVE COMPETENCE
    (Paperwork; Office responsi-
    bilities)

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

8. GETTING ALONG WITH THE PEOPLE
    WHO WORK FOR HIM

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

9. GETTING OR ENCOURAGING WORKERS
    TO DO A GOOD JOB

    1. Very poor

    2. Poor

    3. Average

    4. Good

    5. Excellent

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Please evaluate the overall performance of each supervisor listed by checking the appropriate box. When compared to all other supervisors you know of in this department, how well does each of the following perform?

Supervisor's Name	One of the Best Performing (top 5%)	Performs Well above Average (top 20%)	Performs above Average (top 40%)	Average	Performs Below Average
John Doe					
Joel Smith					
Joe Brown					

TURN OVER

SECTION O - DEMOGRAPHICS

The following information is needed to help us with the statistical analysis of the data. This information will allow comparisons to be made with similar groups in other organizations.

Please answer each of the questions below by writing in the correct information or circling the number next to the right answer.

1. How long have you worked at the Public Works Center?

   _____ years   _____ months

2. How long have you worked in this department?

   _____ years   _____ months

3. How long have you worked in your present supervisory position?

   _____ years   _____ months

4. Sex: 1. Male
        2. Female

5. What is your education level?

   1. Some elementary school (grades 1 to 7)

   2. Completed elementary school (8 grades)

   3. Some high school (9-11 years)

   4. Completed high school (12 years)

   5. Some college or technical training beyond high school (1 to 3 years)

   6. Graduated from college with a bachelor's degree

   7. Graduated from college with an advanced degree (M.A. or Ph.D.)

6. Age: _____

7. Are you: 1. Black   2. White   3. Spanish or Mexican American
            4. Chinese   5. Japanese   6. Hawaiian   7. _____

8. What is your job title? _____

THANK YOU FOR YOUR COOPERATION

APPENDIX B

QUESTIONNAIRE: SUPERVISORS' FORM

OPINION QUESTIONNAIRE
Public Works Center

This questionnaire asks for your opinions and feelings about your work at the Public Works Center (PWC). The information you provide will be used for RESEARCH PURPOSES ONLY. No one at this PWC will ever have access to your individual answers. All responses will be kept completely confidential.

We are very interested in your opinions on all topics in this questionnaire and therefore we encourage your participation. There are no right or wrong answers to these questions, since we are interested in what you think and feel about your work.

Your cooperation in answering all the items is greatly appreciated.

Research Team
Personnel Research and Development Center
San Diego, CA 92152

Fall 1983

Privacy Act Statement

Information concerning your opinions is requested under authority of 57 USC 301 as reflected in OPNAV Notice 5450 of 17 April 1975. This information will be used by NAVPERSRANDCEN to recommend methods of enhancing Public Works Center effectiveness. The information provided will be combined with that provided by other individuals. Individual responses will not be made available to any one. You are not required to provide this information. Your participation is voluntary.

INSTRUCTIONS - SECTION 1

The items in Section 1 deal with your work as a supervisor. We want you to respond to three questions: (A) What do you believe your boss thinks you should do in order to be a good supervisor? (B) What do you believe your workers think you should do in order to be a good supervisor? (C) What do you actually do on the job? We are interested in whether or not there are any differences in your responses to these three questions so please be as honest as possible.

Answer each set of questions in parts A, B, and C by circling the number below the answer that best fits your opinion. Circle only one response in each part. An example of how to respond to the items in Section 1 is given below.

EXAMPLE QUESTION

A. To what extent does your boss think you SHOULD do the following in order to be a good supervisor?

B. To what extent do your workers think you SHOULD do the following in order to be a good supervisor?

C. To what extent do you DO the following?

	To a very large extent	To a large extent	To some extent	To a small extent	Not at all		To a very large extent	To a large extent	To some extent	To a small extent	Not at all		To a very large extent	To a large extent	To some extent	To a small extent	Not at all
1. You act cheerful	⑤	4	3	2	1		5	4	③	2	1		5	4	3	2	①

NOTE: Marking number (5) in part A indicates that you believe your boss thinks you should, to a very large extent, act cheerful in order to be a good supervisor.

Marking number (3) in part B indicates that you believe your workers think you should, to some extent, act cheerful in order to be a good supervisor.

Marking number (1) in part C indicates that you do not at all act cheerful on the job.

TURN OVER

Answer each set of questions in parts A, B, and C by circling the number below the answer that best fits your opinion. Circle only one response in each part.

NOTE: The items are worded with he and his rather than he/she, his/her. If "she, her" is more appropriate please excuse the wording and respond as if items were worded "she/her."

	A. To what extent does your boss think you SHOULD do the following in order to be a good supervisor?					B. To what extent do your workers think you SHOULD do the following in order to be a good supervisor?					C. To what extent do you DO the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
1. Be reluctant/not like to give in when your workers disagree with you.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
2. Let your workers know when you think one of them has done a good job.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
3. Be easy to understand.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
4. Correct your workers' mistakes in front of others.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
5. Stand up for your workers even though it may make you unpopular with your boss.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
6. Require things to be done your way.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
7. Accept suggestions for changes by your workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
8. Keep your workers in good standing with those higher up in the Public Works Center.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
9. Do little things to make it nice to be a member of your work group.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

3

B-3

	A. To what extent does your boss think you SHOULD do the following in order to be a good supervisor?					B. To what extent do your workers think you SHOULD do the following in order to be a good supervisor?					C. To what extent do you DO the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
10. Not hesitate to let your workers know when they make a mistake.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
11. Explain to your workers what you do.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
12. Do things without first asking your workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
13. Carefully plan work far enough in advance.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
14. Demand a great deal of respect.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
15. Be friendly and easy to talk to.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
16. Follow orders even if your workers don't approve.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
17. Want to be liked by your workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
18. Discipline harshly.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
19. Assign some of your responsibilities to your workers in order to get things done.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
20. Usually be eager to try new ideas.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
21. Criticize poor work.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
22. Demand a great deal from your workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
23. Ask for extra work from your workers for the good of the department.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

4

	A. To what extent does your boss think you SHOULD do the following in order to be a good supervisor?.					B. To what extend do your workers think you SHOULD do the following in order to be a good supervisor?					C. To what extent do you DO the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
24. Be understanding of your workers' personal problems.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
25. Insist that your workers follow standard ways of doing things in every detail.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
26. See to it that the workers in your work group work up to their limits.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
27. Offer ways to solve your workers' problems.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
28. Insist that you be informed of decisions made by your workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
29. Push your workers to work harder.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
30. Decide in detail what your work group will do and how it will be done.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
31. Stress the importance of meeting deadlines.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
32. Emphasize the amount of work more than the quality of work.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

5

	A. To what extent does your boss think you SHOULD do the following in order to be a good supervisor?					B. To what extent do your workers think you SHOULD do the following in order to be a good supervisor?					C. To what extent do you DO the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
33. Stress the importance of high morale among your workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
34. Get cooperation from your workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
35. Talk to your boss about how things are going in your work area.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
36. Inspire loyalty in your workers.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
37. Ask for help from your boss.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
38. Take on new responsibilities without complaining.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
39. Allow your workers freedom in how they do their work.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
40. When conflicts come up in your work group, you are able to resolve them.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
41. See to it that your workers have the materials and supplies necessary to do the job.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
42. Emphasize the quality of work more than the amount of work.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

6

TURN OVER

		A. To what extent does your <u>boss</u> think you <u>SHOULD</u> do the following in order to be a good supervisor?					B. To what extent do your <u>workers</u> think you <u>SHOULD</u> do the following in order to be a good supervisor?					C. To what extent do you <u>DO</u> the following?				
		To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
43.	Have a good knowledge of the Public Works Center System.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
44.	Maintain safe working conditions.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
45.	Maintain good relations within the Public Works Center.	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
46.	Support opportunities for improvement for your workers (such as training, education, promotions).	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1

7

INSTRUCTIONS - SECTION 2

The items in Section 2 deal with you and your immediate supervisor (your boss). Please answer each question
by circling the number next to the answer that is best for you. Circle only one response per item.

Example Question

1. The weather in this area is very good.

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

By marking response item (4) you have indicated that you agree that the weather in this area is very good.

1. When your boss is put on the spot, he usually blames the people who work under him.

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

2. To what extent can you count on your boss to "bail you out" at his expense when you really need him?

1. Not at all
2. To a small extent
3. To some extent
4. To a large extent
5. To a very large extent

3. If you discuss personal things with your boss, to what extent can you be confident he won't mention them to others.

1. Not at all
2. To a small extent
3. To some extent
4. To a large extent
5. To a very large extent

4. When your boss says he will do something, he does it!

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

5. You can depend on your boss to give you a straight answer when you ask something.

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

6. Your boss will take credit for your work if he gets a chance.

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

TURN OVER

7. You would feel comfortable letting your boss speak on your behalf to top managers.

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Stronly agree

8. To what extent do you and your boss have similar values about work?

1. Not at all
2. To a small extent
3. To some extent
4. To a large extent
5. To a very large extent

9. To what extent do you and your boss agree about the way people should be treated?

1. Not at all
2. To a small extent
3. To some extent
4. To a large extent
5. To a very large extent

10. To what extent do you and your boss agree about what's right and wrong in the world?

1. Not at all
2. To a small extent
3. To some extent
4. To a large extent
5. To a very large extent

11. How similar are you to your boss compared to most of the people you know?

1. I am much more similar to most of the people I know than to my boss.
2. I am more similar to most of the people I know than to my boss.
3. I am just as similar to my boss as I am to most of the people I know.
4. I am more similar to my boss than I am to most of the people I know.
5. I am much more similar to my boss than I am to most of the people I know.

12. With respect to personal qualities and interests, how much do you and your boss have in common?

1. Nothing
2. Not very much
3. Some
4. Quite a bit
5. A great deal

13. How would you rate your boss as your friend or possible friend?

1. Can't stand to be around him.
2. Would rather not associate with him.
3. He's just another person at work.
4. I enjoy being around him.
5. I would consider him a good friend.

14. How important is it to your supervisor that you be loyal to him?

1. Not important at all.
2. Not too important
3. Somewhat important
4. Important
5. Very important

15. I feel a strong sense of loyalty to my boss.

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

16. If I had a choice, I would rather work for my boss than any other boss in the department.

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

17. Even if I didn't have to, I would still do any job my boss asked me to do.

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

INSTRUCTIONS - SECTION 3

The items in this section are about your job as a supervisor. Please circle the number next to the answer that is best for you. Circle only one response per item.

1. I have too much work for one person to do.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

2. I don't know what my job responsibilities are.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

3. Most of the time I know what I have to do on my job.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

4. Explanations are clear on what has to be done on my job.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

5. On my job there are procedures for handling everything that comes up.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

6. There is not enough time for me to finish my work.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

7. On my job, I know exactly what is expected of me.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

8. My job has rules and regulations for almost everything.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

9. I have plenty of time to get my work done.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

10. I know that I have divided (used) my work time properly.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

10

INSTRUCTIONS - SECTION 4

Circle the number below the answer which best indicates your degree of satisfaction with each of the items in Section 4.
Circle only one number per item.

	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied
1. The people with whom you work.	5	4	3	2	1
2. The opportunities you have to develop your skills.	5	4	3	2	1
3. The pay you receive for the job you do.	5	4	3	2	1
4. The directions and orders you get from your boss.	5	4	3	2	1
5. The respect you get from the people with whom you work.	5	4	3	2	1
6. The way your boss treats you.	5	4	3	2	1
7. The pay you receive for your level of performance.	5	4	3	2	1
8. The recognition you get from your boss for doing a good job.	5	4	3	2	1
9. Your boss in general.	5	4	3	2	1
10. Your job in general.	5	4	3	2	1

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SECTION 5

The following questions are about how you spend your time. Please try to estimate the number of hours you spend in each activity in a typical week.

1. Time you spend talking with your boss about work. _____ hours

2. Time you spend talking with your workers about work. _____ hours

3. Time you and your workers spend working on the same task. _____ hours

4. Time you spend talking or socializing informally with your workers (for example, breaks, lunch, after work hours). _____ hours

5. Time you spend talking or socializing informally with your boss. _____ hours

The items in the following sections deal with the actions you think your subordinates and your boss might take if they were pleased or dissatisfied with you as a supervisor. You will be asked to indicate what you think they would be likely to do and how positive or negative you feel these actions would be.

Your Subordinates

The following items ask you to determine the extent to which you think your subordinates (workers) would be likely to do certain things if they were pleased with you as a supervisor. The second part of the question asks you to say how positive or negative you think it would be if they did do those things. Please read each item and circle the number under the answer which best describes (1) how likely your subordinates would be to do each thing, and (2) how negative or positive such actions would be.

Your subordinates if pleased	To what extent do you think your subordinates would be likely to do each of the following if they were pleased with you as a supervisor?					How positive or negative do you think the results would be if your subordinates did do each of the following?				
	Not at all	To a small extent	To some extent	To a large extent	To a very large extent	Extremely Negative	Negative	Neutral	Positive	Extremely Positive
1. Do more work	1	2	3	4	5	1	2	3	4	5
2. Support your opinions and decisions	1	2	3	4	5	1	2	3	4	5
3. Tell you what a good boss you are to work for	1	2	3	4	5	1	2	3	4	5
4. Try to spend more time with you	1	2	3	4	5	1	2	3	4	5
5. Do better quality work	1	2	3	4	5	1	2	3	4	5
6. Talk among themselves about what a good boss you are to work for	1	2	3	4	5	1	2	3	4	5
7. Do a favor for you	1	2	3	4	5	1	2	3	4	5
8. Other: _____	1	2	3	4	5	1	2	3	4	5

_____
_____
_____
_____
_____

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B-13

13

The following items ask you to determine (1) the extent to which you think your subordinates would be likely to do certain things if they were dissatisfied with you as a supervisor and (2) how positive or negative you think it would be if they did do those things. Circle the answer for each item which best answers these questions.

Your subordinates if dissatisfied	To what extent do you think your subordinates would be likely to do each of the following if they were dissatisfied with you as a supervisor?					How positive or negative do you think the results would be if your subordinates did do each of the following?				
	Not at all	To a small extent	To some extent	To a large extent	To a very large extent	Extremely Negative	Negative	Neutral	Postive	Extremely Positive
9. Yell at you	1	2	3	4	5	1	2	3	4	5
10. Talk with other workers about what a bad boss you are to work for	1	2	3	4	5	1	2	3	4	5
11. Aggressively confront you	1	2	3	4	5	1	2	3	4	5
12. Do less work	1	2	3	4	5	1	2	3	4	5
13. File a grievance	1	2	3	4	5	1	2	3	4	5
14. Do poorer quality work	1	2	3	4	5	1	2	3	4	5
15 Talk to you about the things with which they're dissatisfied.	1	2	3	4	5	1	2	3	4	5
16. Badmouth your opinions and decisions among themselves	1	2	3	4	5	1	2	3	4	5
17. Try to avoid you	1	2	3	4	5	1	2	3	4	5
18. Try to get transferred to work under another supervisor	1	2	3	4	5	1	2	3	4	5
19. Other: _____	1	2	3	4	5	1	2	3	4	5

Your Boss

The following items ask you to determine the extent to which you think your boss would be likely to do certain things if he were pleased with you as one of the supervisors under him. The second part of the question asks you to say how positive or negative you think it would be if he did do those things. Please read each item and circle the number under the answer which best describes (1) how likely your boss would be to do each thing, and (2) how negative or positive such actions would be.

Your boss if pleased	To what extent do you think your boss would be likely to do each of the following if he were pleased with you as one of the supervisors under him?					How positive or negative do you think the results would be if your boss did do each of the following?				
	Not at all	To a small extent	To some extent	To a large extent	To a very large extent	Extremely Negative	Negative	Neutral	Positive	Extremely Positive
1. Allocate more workers to your group	1	2	3	4	5	1	2	3	4	5
2. Grant your work-related requests (such as leave requests, special assignments, and training)	1	2	3	4	5	1	2	3	4	5
3. Tell you he was pleased	1	2	3	4	5	1	2	3	4	5
4. Be friendlier	1	2	3	4	5	1	2	3	4	5
5. Tell others what a good supervisor you are	1	2	3	4	5	1	2	3	4	5
6. Give you preferred work assignments	1	2	3	4	5	1	2	3	4	5
7. Recommend you for a promotion	1	2	3	4	5	1	2	3	4	5
8. Supervise you less closely	1	2	3	4	5	1	2	3	4	5
9. Praise you in a written memo or message	1	2	3	4	5	1	2	3	4	5
10. Give you a better performance evaluation	1	2	3	4	5	1	2	3	4	5
11. Recommend you for an award	1	2	3	4	5	1	2	3	4	5
12. Other: _____	1	2	3	4	5	1	2	3	4	5

The following items ask you to determine (1) the extent to which you think your boss would be likely to do certain things if he were dissatisfied with you as one of the supervisors under him and (2) how positive or negative you think it would be if he did do those things. Circle the answer for each item which best answers these questions.

	To what extent do you think your boss would be likely to do each of the following if he were dissatisfied with you as one of the supervisors under him?					How positive or negative do you think the results would be if your boss did do each of the following?				
Your boss if dissatisfied	Not at all	To a small extent	To some extent	To a large extent	To a very large extent	Extremely Negative	Negative	Neutral	Positive	Extremely Positive
13. Discuss the problem	1	2	3	4	5	1	2	3	4	5
14. Not be as friendly	1	2	3	4	5	1	2	3	4	5
15. Tell others what a bad supervisor you are	1	2	3	4	5	1	2	3	4	5
16. Criticize you in a written memo or message	1	2	3	4	5	1	2	3	4	5
17. Deny your work-related requests (such as leave requests, special assignments, and training)	1	2	3	4	5	1	2	3	4	5
18. Give you the worst work	1	2	3	4	5	1	2	3	4	5
19. Give you a poorer performance evaluation	1	2	3	4	5	1	2	3	4	5
20. Not recommend you for a promotion	1	2	3	4	5	1	2	3	4	5
21. Supervise you more closely	1	2	3	4	5	1	2	3	4	5
22. Not allocate as many workers to your group	1	2	3	4	5	1	2	3	4	5
23. Implement formal disciplinary procedures	1	2	3	4	5	1	2	3	4	5
24. Other: _____	1	2	3	4	5	1	2	3	4	5

SECTION 0 - DEMOGRAPHICS

The following information is needed to help us with the statistical analysis of the data. This information will allow comparisons to be made with similar groups in other organizations.

Please answer each of the questions below by writing in the correct information or circling the number next to the right answer.

1. How long have you worked at the Public Works Center?

____ years   ____ months

2. How long have you worked in this department?

____ years   ____ months

3. How long have you worked as a supervisor in this department?

____ years   ____ months

4. How long have you been the supervisor for your present group?

____ years   ____ months

5. Sex: 1. Male
        2. Female

6. What is your education level?

   1. Some elementary school (grades 1 to 7)
   2. Completed elementary school (8 grades)
   3. Some high school (9-11 years)
   4. Completed high school (12 years)
   5. Some college or technical training beyond high school (1 to 3 years)
   6. Graduated from college with a bachelor's degree
   7. Graduated from college with an advanced degree (M.S. or Ph.D.)

7. Age: ____

8. Are you: 1. Black   2. White   3. Spanish or Mexican American

             2. Chinese   5. Japanese   6. Hawaiian   7. _____

9. What is your job title? _____

17   THANK YOU FOR YOUR COOPERATION

APPENDIX C

QUESTIONNAIRE: WORKERS' FORM

OPINION QUESTIONNAIRE
Public Works Center

This questionnaire asks for your opinions and feelings about your work at the Public Works Center (PWC). The information you provide will be used for RESEARCH PURPOSES ONLY. No one at this PWC will ever have access to your individual answers. All responses will be kept completely confidential.

We are very interested in your opinions on all topics in this questionnaire and therefore we encourage your participation. There are no right or wrong answers to these questions, since we are interested in what you think and feel about your work.

. Your cooperation in answering all the items is greatly appreciated.

Research Team
Personnel Research and Development Center
San Diego, CA 92152

Fall 1983

Privacy Act Statement

Information concerning your opinions is requested under authority of 57 USC 301 as reflected in OPNAV Notice 5450 of 17 April 1975. This information will be used by NAVPERSRANDCEN to recommend methods of enhancing Public Works Center effectiveness. The information provided will be combined with that provided by other individuals. Individual responses will not be made available to any one. You are not required to provide this information. Your participation is voluntary.

INSTRUCTIONS - SECTION 1

The items in Section 1 deal with your supervisor. We want you to respond to two questions: (A) What do you think your supervisor should do in order to be a good supervisor? (B) What does your supervisor actually do on the job? We are interested in whether or not there are any differences in your responses to these two questions so please be as honest as possible.

> Please answer each set of questions in parts A and B by circling the number below the answer that best fits your opinion. Circle only one response in each part. An example of how to respond to the items in Section 1 is given below.

EXAMPLE QUESTION

	A. To what extent SHOULD your supervisor do the following in order to be a good supervisor?					B. To what extent DOES your supervisor do the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
1. He acts cheerful	⑤	4	3	2	1	5	4	3	2	①

NOTE: Marking number (5) in part A indicates that you think your supervisor should, to a very large extent, act cheerful.

Marking number (1) in part B indicates that your supervisor does not at all act cheerful.

SECTION 1

> Please answer each set of questions in parts A and B by circling the number below the answer that best fits your opinion. Circle only one response in each part.

NOTE: The items are worded with "he" rather than he/she. If your supervisor is a woman, please excuse the wording and respond as if items were worded "she."

	A. To what extent SHOULD your supervisor do the following in order to be a good supervisor?					B.. To what extent DOES your supervisor do the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
1. He is reluctant/doesn't like to give in when his workers disagree with him.	5	4	3	2	1	5	4	3	2	1
2. He lets us know when he thinks one of us has done a good job.	5	4	3	2	1	5	4	3	2	1
3. He is easy to understand.	5	4	3	2	1	5	4	3	2	1
4. He corrects his workers' mistakes in front of others.	5	4	3	2	1	5	4	3	2	1
5. He stands up for his workers even though it may make him unpopular with his boss.	5	4	3	2	1	5	4	3	2	1

2

TURN OVER

	A. To what extent SHOULD your supervisor do the following in order to be a good supervisor?					B. To what extent DOES your supervisor do the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
6. He requires things to be done his way.	5	4	3	2	1	5	4	3	2	1
7. He accepts suggestions for changes by his workers.	5	4	3	2	1	5	4	3	2	1
8. He keeps his workers in good standing with those higher up in the Public Works Center.	5	4	3	2	1	5	4	3	2	1
9. He does little things to make it nice to be a member of his work group.	5	4	3	2	1	5	4	3	2	1
10. He doesn't hesitate to let his workers know when they have made a mistake.	5	4	3	2	1	5	4	3	2	1
11. He explains to his workers what he does.	5	4	3	2	1	5	4	3	2	1
12. He does things without first asking his workers.	5	4	3	2	1	5	4	3	2	1
13. He carefully plans work far enough in advance.	5	4	3	2	1	5	4	3	2	1
14. He demands a great deal of respect.	5	4	3	2	1	5	4	3	2	1
15. He is friendly and easy to talk to.	5	4	3	2	1	5	4	3	2	1
16. He follows his boss' orders even if his workers don't approve.	5	4	3	2	1	5	4	3	2	1
17. He wants to be liked by his workers.	5	4	3	2	1	5	4	3	2	1
18. He disciplines harshly.	5	4	3	2	1	5	4	3	2	1
19. He assigns some of his responsibilities to his workers in order to get things done.	5	4	3	2	1	5	4	3	2	1
20. He is usually eager to try new ideas.	5	4	3	2	1	5	4	3	2	1
21. He criticizes poor work.	5	4	3	2	1	5	4	3	2	1
22. He demands a great deal from his workers.	5	4	3	2	1	5	4	3	2	1
23. He asks for extra work from his workers for the good of the department.	5	4	3	2	1	5	4	3	2	1
24. He is understanding of his workers' personal problems.	5	4	3	2	1	5	4	3	2	1
25. He insists that his workers follow standard ways of doing things in every detail.	5	4	3	2	1	5	4	3	2	1
26. He sees to it that the workers in his work group work up to their limits.	5	4	3	2	1	5	4	3	2	1

3

	A. To what extent SHOULD your supervisor do the following in order to be a good supervisor?					B. To what extent DOES your supervisor do the following?				
	To a very large extent	To a large extent	To some extent	To a small extent	Not at all	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
27. He offers ways to solve our problems.	5	4	3	2	1	5	4	3	2	1
28. He insists that he be informed of decisions made by his workers.	5	4	3	2	1	5	4	3	2	1
29. He pushes his workers to work harder.	5	4	3	2	1	5	4	3	2	1
30. He decides in detail what his workers will do and how it will be done.	5	4	3	2	1	5	4	3	2	1
31. He stresses the importance of meeting deadlines.	5	4	3	2	1	5	4	3	2	1
32. He emphasizes the amount of work more than the quality of work.	5	4	3	2	1	5	4	3	2	1
33. He stresses the importance of high morale among the workers.	5	4	3	2	1	5	4	3	2	1
34. He gets cooperation from his workers.	5	4	3	2	1	5	4	3	2	1
35. He talks to his boss about how things are going in his work area.	5	4	3	2	1	5	4	3	2	1
36. He inspires loyalty in his workers.	5	4	3	2	1	5	4	3	2	1
37. He asks for help from his boss.	5	4	3	2	1	5	4	3	2	1
38. He takes on new responsibilities without complaining.	5	4	3	2	1	5	4	3	2	1
39. He allows his workers freedom in how they do their work.	5	4	3	2	1	5	4	3	2	1
40. When conflicts come up in his work group he is able to resolve them.	5	4	3	2	1	5	4	3	2	1
41. He sees to it that his workers have the materials and supplies necessary to do the job.	5	4	3	2	1	5	4	3	2	1
42. He emphasizes the quality of work more than the amount of work.	5	4	3	2	1	5	4	3	2	1
43. He has a good knowledge of the Public Works Center System.	5	4	3	2	1	5	4	3	2	1
44. He maintains safe working conditions.	5	4	3	2	1	5	4	3	2	1
45. He maintains good relations within the Public Works Center.	5	4	3	2	1	5	4	3	2	1
46. He supports opportunities for improvement for his workers (such as training, education, promotions).	5	4	3	2	1	5	4	3	2	1

4

TURN OVER

INSTRUCTIONS - SECTION 2

The items in Section 2 deal with you and your immediate supervisor (foreman). Please answer each question by circling the number next to the answer that is best for you. Circle only one response per item.

Example Question

1. The weather in this area is very good.

   1. Strongly disagree
   2. Disagree
   3. Neither agree nor disagree
   (4.) Agree
   5. Strongly agree

By marking response item (4) you have indicated that you agree that the weather in this area is very good.

1. When your supervisor is put on the spot, he usually blames the people who work under him.

   1. Strongly disagree
   2. Disagree
   3. Neither agree nor disagree
   4. Agree
   5. Strongly agree

2. To what extent can you count on your supervisor to "bail you out" at his expense when you really need him?

   1. Not at all
   2. To a small extent
   3. To some extent
   4. To a large extent
   5. To a very large extent

3. If you discuss personal things with your supervisor, to what extent can you be confident he won't mention them to others.

   1. Not at all
   2. To a small extent
   3. To some extent
   4. To a large extent
   5. To a very large extent

4. When your supervisor says he will do something, he does it!

   1. Strongly disagree
   2. Disagree
   3. Neither agree nor disagree
   4. Agree
   5. Strongly agree

5. You can depend on your supervisor to give you a straight answer when you ask something.

   1. Strongly disagree
   2. Disagree
   3. Neither agree nor disagree
   4. Agree
   5. Strongly agree

6. Your supervisor will take credit for your work if he gets a chance.

   1. Strongly disagree
   2. Disagree
   3. Neither agree nor disagree
   4. Agree
   5. Strongly agree

7. You would feel comfortable letting your supervisor speak on your behalf to top managers.

   1. Strongly disagree
   2. Disagree
   3. Neither agree nor disagree
   4. Agree
   5. Strongly agree

8. To what extent do you and your supervisor have similar values about work?

   1. Not at all
   2. To a small extent
   3. To some extent
   4. To a large extent
   5. To a very large extent

5

9. To what extent do you and your supervisor agree
   about the way people should be treated?

   1. Not at all
   2. To a small extent
   3. To some extent
   4. To a large extent
   5. To a very large extent

10. To what extent do you and your supervisor agree
    about what's right and wrong in the world?

    1. Not at all
    2. To a small extent
    3. To some extent
    4. To a large extent
    5. To a very large extent

11. How similar are you to your supervisor
    compared to most of the people you know?

    1. I am much more similar to most of the
       people I know than to my supervisor.
    2. I am more similar to most of the people
       I know than to my supervisor.
    3. I am just as similar to my supervisor as
       I am to most of the people I know.
    4. I am more similar to my supervisor than I am
       to most of the people I know.
    5. I am much more similar to my supervisor than
       I am to most of the people I know.

12. With respect to personal qualities and
    interests, how much do you and your
    supervisor have in common?

    1. Nothing
    2. Not very much
    3. Some
    4. Quite a bit
    5. A great deal

13. How would you rate your supervisor as your
    friend or possible friend?

    1. Can't stand to be around him.
    2. Would rather not associate with him.
    3. He's just another person at work.
    4. I enjoy being around him.
    5. I would consider him a good friend.

14. How important is it to your supervisor that
    you be loyal to him?

    1. Not important at all
    2. Not too important
    3. Somewhat imporant
    4. Important
    5. Very important

15. I feel a strong sense of loyalty to my
    supervisor.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

16. If I had a choice, I would rather work for my
    supervisor more than any other supervisor in
    the department.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

17. Even if I didn't have to, I would still do any
    job my supervisor asked me to do.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

INSTRUCTIONS - SECTION 3

The items in Section 3 ask about you and your work group. Please answer each question by circling the number next to the answer that is best for you. Circle only one number per item.

NOTE: The term work group refers to the people you work with who report to the same supervisor that you report to.

1. How does your work group compare to others in this department in the way people stick together? My work group is:

    1. Below average
    2. Average
    3. Above average
    4. One of the best
    5. The best

2. Most of the workers in this department feel that my work group is:

    1. Below average in performance
    2. Average in performance
    3. Above average in performance (top 40%)
    4. One of the best performing (top 20%)
    5. The best performing

3. People in my work group are friendly to one another.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

4. There is friction and conflict among people in my work group.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

5. People in my work group try to do the best job possible.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

6. I like the people in my work group.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

7. There is a spirit of cooperation (willingness to help one another) in my work group.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

8. People in my work group trust one another.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

9. If you had a chance to do the same kind of work for the same pay in another work group, how would you feel about it?

    1. Would want very much to work in another work group.
    2. Would prefer to work in another work group.
    3. Would make no difference to me.
    4. Would prefer to stay in this work group.
    5. Would want very much to stay in this work group.

10. People in my work group cooperate to get the job done.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

11. People in my work group are willing to listen to one another's problems.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

12. How do you feel your work group performs compared to all other work groups in the department? My work group is:

    1. Below average in performance
    2. Average in performance
    3. Above average in performance (top 40%)
    4. One of the best performing (top 20%)
    5. The best performing

7

13. People in my work group help one another to get hard jobs done.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

14. People in my work group take pride in the jobs they do.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

15. I feel that I am really part of my work group.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

16. People in my work group try to do the best job possible.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

17. To what extent does how hard you work affect how well your work group does?

   1. Not at all
   2. To a small extent
   3. To some extent
   4. To a large extent
   5. To a very large extent

18. People in my work group think that we are the best work group in the department.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

19. How would you rate the quality of work done by your work group?

   1. Poor
   2. Fair
   3. Good
   4. Very good
   5. Excellent/outstanding

20. People in my work group would rather work in some other work group.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

21. How does your work group compare to others in this department in the way people get along together? My work group is:

   1. Below average
   2. Average
   3. Above average
   4. One of the best
   5. The best

22. People in my work group have a hard time talking to one another.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

23. Most of the supervisors in this department feel that my work group is:

   1. Below average in performance
   2. Average in performance
   3. Above average in performance (top 40%)
   4. One of the best performing (top 20%)
   5. The best performing

24. How hard I work makes a difference in my work group's performance.

   1. Strongly disagree
   2. Disagree
   3. Not sure
   4. Agree
   5. Strongly agree

SECTION 4

DESCRIBE YOUR SUPERVISOR

The following is a list of opposite adjectives. People can usually be described as being more like one extreme or the other on these adjectives. Please circle the number that best represents where, on each dimension, you think your supervisor fits.

Your supervisor is:

1.	Adaptable	1 2 3 4 5	Inflexible
2.	Aggressive	1 2 3 4 5	Passive
3.	Friendly	1 2 3 4 5	Unfriendly
4.	Self-confident	1 2 3 4 5	Insecure
5.	Uncooperative	1 2 3 4 5	Cooperative
6.	Sociable	1 2 3 4 5	Unsociable
7.	Harsh	1 2 3 4 5	Mellow
8.	Soft-spoken	1 2 3 4 5	Loud
9.	Honest	1 2 3 4 5	Dishonest
10.	Strict	1 2 3 4 5	Easy
11.	Kind	1 2 3 4 5	Unkind
12.	Fair	1 2 3 4 5	Unfair
13.	Tense	1 2 3 4 5	Relaxed
14.	Strong	1 2 3 4 5	Weak
15.	Lazy	1 2 3 4 5	Ambitious
16.	Forgiving	1 2 3 4 5	Unforgiving

The items on this page ask about your supervisor. For each item, please circle the one number next to the answer you think describes your supervisor best.

Please rate your supervisor on each of the following. How effective (good) is he in each of the following areas:

1. Technical competence (knowing the job)
   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

2. Getting along with his boss
   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

3. Giving directions clearly and when needed
   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

4. Performing under pressure
   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

5. Dependability
   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

6. Cooperating with other supervisors to get the job done
   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

7. Administrative competence (paper work; office responsibilities)
   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

8. Getting along with the people who work for him
   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

9. Getting or encouraging workers to do a good job
   1. Very poor
   2. Poor
   3. Average
   4. Good
   5. Excellent

10. How much more do you think most people in your work group could produce if you had an ideal supervisor?
    1. People are producing as much as they could with any supervisor.
    2. People could produce a little more with a better supervisor.
    3. People could produce moderately more with a better supervisor.
    4. People could produce quite a bit more with a better supervisor.
    5. People could produce a great deal more with a better supervisor.
    6. The supervisor in no way affects how much people could produce.

GO TO NEXT PAGE

INSTRUCTIONS - SECTION 6

The items in this section are about your job as a worker. Please circle the number next to the
answer that is best for you. Circle only one response per item.

1. I have too much work for one person to do.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

2. I don't know what my job responsibilities are.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

3. Most of the time I know what I have to do on my job.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

4. Explanations are clear on what has to be done on my job.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

5. On my job there are procedures for handling everything
    that comes up.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

6. There is not enough time for me to finish my work.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

7. On my job, I know exactly what is expected of me.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

8. My job has rules and regulations for almost everything.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

9. I have plenty of time to get my work done.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

10. .I know that I have divided (used) my work time properly.

    1. Strongly disagree
    2. Disagree
    3. Not sure
    4. Agree
    5. Strongly agree

TURN OVER

INSTRUCTIONS - SECTION 7

Circle the number below the answer which best indicates your degree of satisfaction with each of the items in Section 7. Circle only one number per item.

	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied
1. The people with whom you work.	5	4	3	2	1
2. The opportunities you have to develop your skills.	5	4	3	2	1
3. The pay you receive for the job you do.	5	4	3	2	1
4. The directions and orders you get from your supervisor.	5	4	3	2	1
5. The respect you get from the people with whom you work.	5	4	3	2	1
6. The way your supervisor treats you.	5	4	3	2	1
7. The pay you receive for your level of performance.	5	4	3	2	1
8. The recognition you get from your supervisor for doing a good job.	5	4	3	2	1
9. Your supervisor in general.	5	4	3	2	1
10. Your job in general.	5	4	3	2	1

Job Characteristics

The items in this section describe your job. Please circle the number next to the answer that is best for you. Circle only one response per item.

1. Your job requires you to use a number of complex or high level skills.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

2. Your job requires a lot of cooperative work with co-workers.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

3. Your job requires you to handle a number of surprising or unexpected situations.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

4. You do pretty much the same things over and over and use the same equipment and procedures almost all the time.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

5. Your job is one where it is easy to distinguish between good and poor performers.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

6. You do an entire job from start to finish and can clearly see what was done as your work.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

7. You do many different things and use a wide variety of equipment and procedures.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

8. Your job gives you considerable opportunity for independence and freedom in how you do your work.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

9. You have almost no say about scheduling the work; procedures are all laid out for you in detail.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

10. Your job requires that you work outdoors most of the time.

    1. Strongly Disagree
    2. Disagree
    3. Neither Agree nor Disagree
    4. Agree
    5. Strongly Agree

11. You are exposed to a great deal of noise on your job.

    1. Strongly Disagree
    2. Disagree
    3. Neither Agree nor Disagree
    4. Agree
    5. Strongly Agree

12. Your job is one which is closely supervised by your boss.

    1. Strongly Disagree
    2. Disagree
    3. Neither Agree nor Disagree
    4. Agree
    5. Strongly Agree

13. On your job, the instructions you get from your supervisor are usually written.

    1. Strongly Disagree
    2. Disagree
    3. Neither Agree nor Disagree
    4. Agree
    5. Strongly Agree

14. On your job, the instructions you get from your supervisor are usually verbal.

    1. Strongly Disagree
    2. Disagree
    3. Neither Agree nor Disagree
    4. Agree
    5. Strongly Agree

15. You receive instruction or directions from your supervisor:

    1. daily.
    2. weekly.
    3. monthly.
    4. almost never.

16. Your job requires you to work with computers or word processors.

    1. Strongly Disagree
    2. Disagree
    3. Neither Agree nor Disagree
    4. Agree
    5. Strongly Agree

17. You generally perform your job with your supervisor nearby.

    1. Strongly Disagree
    2. Disagree
    3. Neither Agree nor Disagree
    4. Agree
    5. Strongly Agree

18. Your supervisor is available to answer questions either in person or by telephone.

    1. Almost Never
    2. Seldom
    3. Occasionally
    4. Frequently
    5. Very Frequently

12

TURN OVER

19. How are your working hours recorded?

   1. You punch a time clock <u>every</u> day
   2. You punch a time clock except when
      you're working at another jobsite
   3. You keep track of your hours by hand
   4. Someone else keeps track of your
      hours (such as a secretary).
   5. Other _____

20. Your job is one which requires a good
    deal of physical activity.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

21. Your job requires a lot of contact with
    the public (for example, with customers).

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

22. Your job usually consists of doing
    projects which are completed in a
    few hours or less.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

23. In your job, problems generally have
    clear-cut solutions.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

24. Your job is one which can be dangerous
    and requires safety precautions.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

25. Your work group must coordinate its work with
    other work groups in order to get a job done.

   1. Strongly Disagree
   2. Disagree
   3. Neither Agree nor Disagree
   4. Agree
   5. Strongly Agree

- -

Some of the jobs at PWCs require that employees work at
different jobsites. Changing jobsites may happen within
one day or over a period of time. Please select the option
below which best describes the location of your job on a
typical day and over a years period of time.

26. On a <u>typical day</u>,

   1. I work all day at the same place.
   2. I work most of the day in the same place but
      am required to go to different places for a
      small portion of the day.
   3. I work about half the day at (an)other place(s).
   4. I work mostly in different places, but have a
      "home base" at which I spend a small portion
      of the day.
   5. I work at different places all during the day.

27. Over a <u>years period of time</u>,

   1. I work at the same place.
   2. I mostly work in the same place, but
      occasionally work at other places.
   3. I work about half the time in one place,
      and about half the time in other places.
   4. I work mostly in different places,
      but have a "home base" where I spend a
      small amount of time.
   5. Other: _____

The following questions are about how
you spend your time. Please try to
estimate the number of hours you spend
in each activity in a typical week.

1. Time you spend talking with your
   supervisor about work.

   _____ hours

2. Time your supervisor spends on
   your jobsite.

   _____ hours

3. Time you spend working with your
   supervisor on the same task.

   _____ hours

4. Time you and your supervisor
   spend talking or socializing
   informally (for example, breaks,
   lunch, after work hours).

   _____ hours

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C-13

The items in this section deal with things you might do if you were pleased or dissatisfied with your supervisor. Please circle the number under the answer that best describes how likely you would be to do each of the following things. Circle only one response per item.

To what extent would you be likely to do each of the following if you were pleased with your supervisor?

If pleased, to what extent would you:	Not at all	To a small extent	To some extent	To a large extent	To a very large extent
1. Do more work	1	2	3	4	5
2. Support your supervisor's opinions and decisions to fellow workers	1	2	3	4	5
3. Tell your supervisor what a good boss he is to work for	1	2	3	4	5
4. Try to spend more time with your supervisor	1	2	3	4	5
5. Do better quality work	1	2	3	4	5
6. Tell fellow workers what a good boss he is to work for	1	2	3	4	5
7. Do a favor for your supervisor	1	2	3	4	5
8. Other: _____	1	2	3	4	5

To what extent would you be likely to do each of the following if your were dissatisfied with your supervisor?

If, dissatisfied, to what extent would you:	Not at all	To a small extent	To some extent	To a large extent	To a very large extent
9. Yell at your supervisor	1	2	3	4	5
10. Talk with other workers about what a bad boss he is to work for	1	2	3	4	5
11. Aggressively confront your supervisor	1	2	3	4	5

CONTINUED

If dissatisfied, to what extent would you:	Not at all	To a small extent	To some extent	To a large extent	To a very large extent
12. Do less work	1	2	3	4	5
13. File a grievance	1	2	3	4	5
14. Do poorer quality work	1	2	3	4	5
15. Talk to your supervisor about the things with which you're dissatisfied	1	2	3	4	5
16. Badmouth your supervisor's opinions and decisions to your fellow workers	1	2	3	4	5
17. Try to avoid your supervisor	1	2	3	4	5
18. Try to get transferred to work under another supervisor	1	2	3	4	5
19. Other: _____	1	2	3	4	5

14

SECTION 0 - DEMOGRAPHICS

The following information is needed to help us with the statistical analysis of the data. This information will allow comparisons to be made with similar groups in other organizations.

> Please answer each of the questions below by writing in the correct information or circling the number next to the right answer.

1. How long have you worked at the Public Works Center?

   ____ years   ____ months

2. How long have you worked in this department?

   ____ years   ____ months

3. How long have you been in your present work group?

   ____ years   ____ months

4. How long have you worked for your present supervisor?

   ____ years   ____ months

5. Sex: 1. Male
        2. Female

6. What is your education level?

   1. Some elementary school (grades 1 to 7)

   2. Completed elementary school (8 grades)

   3. Some high school (9-11 years)

   4. Completed high school (12 years)

   5. Some college or technical training beyond high school (1 to 3 years)

   6. Graduated from college with a bachelor's degree

   7. Graduated from college with an advanced degree (M.S. or Ph.D.)

7. Age: ____

8. Are you: 1. Black   2. White   3. Spanish or Mexican American

   4. Chinese   5. Japanese   6. Hawaiian   7. _____

9. What is your job title: _____

15   THANK YOU FOR YOUR COOPERATION

APPENDIX D

SUMMARY OF FACTOR ANALYSIS AND SCALE CREATION FOR INDICES
OF SUPERVISORY BEHAVIOR AND EXPECTATIONS

Summary of Factor Analysis and Scale Creation for Indices
of Supervisory Behavior and Expectations

Factor/Item Content	Factor Loadings

I. SUPERVISORY BEHAVIOR - Forty-six average perceptions from workers, supervisors, and bosses went into factor analysis.

A. Supportive Behavior (SUPBEHAV) - Averaged summation of 24 perceptions from workers, supervisors, and bosses.

NB	36	Inspires loyalty in workers.	.88
NB	34	Gets cooperation from workers.	.83
NB	40	Is able to resolve conflicts in his work group.	.81
NB	46	Supports opportunities for improvement for his workers.	.78
NB	27	Offers ways to solve problems.	.76
NB	33	Stresses the importance of high morale.	.76
NB	45	Maintains good relations within the PWC.	.74
NB	5	Stands up for workers.	.73
NB	3	Is easy to understand.	.72
NB	15	Is friendly and easy to talk to.	.71
NB	24	Is understanding of workers' personal problems.	.71
NB	44	Maintains safe working conditions.	.68
NB	41	Sees workers have materials and supplies to do the job.	.67
NB	2	Lets workers know when they have done a good job.	.66
NB	43	Has a good knowledge of the PWC system.	.64
NB	8	Keeps workers in good standing with those in higher authority.	.63
NB	7	Accepts suggestions for changes.	.63
NB	9	Does little things to make it nice to be a member of his work group.	.63
NB	20	Is usually eager to try new ideas.	.62
NB	11	Explains to workers what he does.	.62
NB	42	Emphasizes the quality of work more than the amount of work.	.58
NB	13	Plans work in advance.	.58
NB	38	Takes on additional responsibilities without complaining.	.43
NB	39	Allows workers freedom in how they do their work.	.42

Standardized alpha = .96

B. Demanding Behavior (DEMBEHAV) - Averaged summation of 15 perceptions from workers, supervisors, and bosses.

NB	22	Demands a great deal from his workers.	.76
NB	29	Pushes his workers to work harder.	.74
NB	21	Criticizes poor work.	.69
NB	18	Disciplines harshly.	.67
NB	31	Stresses the importance of meeting deadlines.	.64
NB	6	Requires things to be done his way.	.62
NB	28	Insists he be informed of decisions made by workers.	.62
NB	14	Demands a great deal of respect.	.59
NB	10	Doesn't hesitate to let his workers know when they've made a mistake.	.58
NB	25	Insists workers follow standard ways of doing things.	.57
NB	23	Asks for extra work from workers for the good of the department.	.56
NB	4	Corrects workers' mistakes in front of others.	.48
NB	30	Decides in detail what his workers will do and how it will be done.	.45
NB	32	Emphasizes the amount of work more than the quality of work.	.44
NB	1	Is reluctant to give in when workers disagree.	.42

Standardized alpha = .87

II.   <u>EXPECTATIONS OF SUPERVISORS</u> - In order to compare expectations and behavior, expectation constructs were created on the basis of scales suggested by factor analysis of 46 behavior items).

A. Worker Supportive Behavior Expectations (WKEXPSUP) - Average of 24 expectations of workers as perceived by supervisors.

B. Worker Demanding Behavior Expectations (WKEXPDEM) - Average of 15 expectations of workers as perceived by supervisors.

C. Boss Supportive Behavior Expectations (BEXPSUP) - Average of 24 expectations of bosses as perceived by supervisors.

D. Boss Demanding Behavior Expectations (BEXPDEM) - Average of 15 expectations of bosses as perceived by supervisors.

APPENDIX E

SUMMARY OF FACTOR ANALYSES AND SCALE CREATION FOR JOB
CHARACTERISTICS, PERSONAL CHARACTERISTICS, JOB SATISFACTION,
WORK GROUP CLIMATE, AND OVERLOAD/AMBIGUITY CONSTRUCTS

Summary of Factor Analyses and Scale Creation for Job
Characteristics, Personal Characteristics, Job
Satisfaction, Work Group Climate,
and Overload/Ambiguity Constructs

Topic Area	Construct/Item Content	Factor Loading

I. <u>Job Characteristics</u> (Constructs were created as suggested by factor analysis of 27 job characteristic items.)

    A. <u>Job Complexity/Autonomy</u> (JCCOMPLX)

WJC4	You do different things and use a variety of equipment.	.62
WJC6	You do an entire job from start to finish.	.61
WJC1	Your job requires high level skills.	.60
WJC3	Your job requires you to handle surprising situations.	.59
WJC8	You have independence in how you do your work.	.56
WJC2	Your job requires cooperative work with others.	.44
WJC21	Your job requires a lot of contact with the public.	.43

       Standardized alpha = .75

    B. <u>Blue Collar Versus White Collar</u> (JCBLWH)

WJC24	Your job can be dangerous.	.81
WJC20	Your job requires a good deal of physical activity.	.75
WJC10	Your job requires you to work outdoors.	.72
WJC11	You are exposed to a lot of noise on your job.	.57

       Standardized alpha = .85

    C. <u>Routineness</u> (JCROUTN)

WJC22	You do projects completed in a few hours or less.	.60
WJC23	Problems on your job generally have clear-cut solutions.	.55
WJC4	You do the same things over and over.	.52

       Standardized alpha = .57

    D. <u>Work Location</u> (JCLOCATN)

WJC27	Time spent in the same place (vs. a variety of places) in a typical year.	.77
WJC26	Time spent in the same place (vs. a variety of places) in a typical day.	.73

       Pearson correlation = .73

Summary of Factor Analyses and Scale Creation for Job
Characteristics, Personal Characteristics, Job
Satisfaction, Work Group Climate,
and Overload/Ambiguity Constructs

Topic Area	Construct/Item Content	Factor Loading

I. <u>Job Characteristics (Cont'd)</u>

    E.   <u>Closeness of Supervision</u> (JCSUPV)

WJC17	You generally perform your job with your supervisor nearby.	.71
WJC12	Your job is closely supervised by your boss.	.63
WJC18	Your supervisor is available to answer questions.	.48

        Standardized alpha = .65

II. <u>Personal Characteristics</u> (Constructs were created as suggested by factor analysis of 16 personality measures.)

    A.   <u>Positive Personal Characteristics</u> (PERSN1)

WA3	Friendly	.85
WA11	Kind	.85
WA12	Fair	.82
WA9	Honest	.75
WA1	Adaptable	.74
WA5	Cooperative	.71
WA16	Forgiving	.68
WA7	Mellow	.65
WA8	Soft-spoken	.64
WA6	Sociable	.63
WA13	Relaxed	.58

        Standardized alpha = .92

    B.   <u>Negative Personal Characteristics</u> (PERSN2)

WA10	Strict	.70
WA2	Aggressive	.63
WA15	Lazy	.59

        Standardized alpha = .66

Summary of Factor Analyses and Scale Creation for Job
Characteristics, Personal Characteristics, Job
Satisfaction, Work Group Climate,
and Overload/Ambiguity Constructs

Topic Area	Construct/Item Content	Factor Loading
III.	**Supervisor Satisfaction** (Constructs were created as suggested by factor analysis of 10 job satisfaction items.)	
	A. Supervisor Satisfaction with Boss (SSAT1)	
	SJS9 Satisfaction with your boss in general.	.92
	SJS6 Satisfaction with the way your boss treats you.	.85
	SJS8 Satisfaction with the recognition you get from your boss in doing a good job.	.74
	SJS4 Satisfaction with directions and orders you get from your boss.	.71
	Standardized alpha = .89	
	B. Supervisor Satisfaction with Job and Co-workers (SSAT2)	
	SJS5 Satisfaction with the respect you get from the people with whom you work.	.74
	SJS10 Satisfaction with your job in general.	.59
	SJS1 Satisfaction with the people with whom you work.	.58
	Standardized alpha = .66	
	C. Supervisor Satisfaction with Pay (SSAT3)	
	SJS7 Satisfaction with the pay you receive for your level of performance.	.99
	SJS3 Satisfaction with the pay you receive for the job you do.	.93
	Standardized alpha = .96	
IV.	**Worker Satisfaction** (Constructs were created as suggested by factor analysis of 10 job satisfaction items.)	
	A. Worker Satisfaction with Supervisor (WSAT1)	
	WJS9 Satisfaction with your supervisor in general.	.91
	WJS6 Satisfaction with the way your supervisor treats you.	.88
	WJS4 Satisfaction with directions and orders you get from your supervisor.	.76
	WJS8 Satisfaction with the recognition you get from your supervisor for doing a good job.	.73
	Standardized alpha = .92	

Summary of Factor Analyses and Scale Creation for Job Characteristics, Personal Characteristics, Job Satisfaction, Work Group Climate, and Overload/Ambiguity Constructs

Topic Area	Construct/Item Content	Factor Loading

IV. Worker Satisfaction (Cont'd)

B. Worker Satisfaction with Job and Co-workers (WSAT2)

WJS5	Satisfaction with the respect you get from the people with whom you work.	.72
WJS2	Satisfaction with the opportunities you have to develop your skills.	.71
WJS1	Satisfaction with the people with whom you work.	.69
WJS10	Satisfaction with your job in general.	.55

Standardized alpha = .89

C. Worker Satisfaction with Pay (WSAT3)

WJS3	Satisfaction with the pay you receive for the job you do.	.89
WJS7	Satisfaction with the pay you receive for your level of performance.	.81

Standardized alpha = .89

V. Work Group Climate (Constructs were created as suggested by factor analysis of 24 items.)

A. Work Group Cooperation/Morale (WKGP1)

WWG10	People in my work group cooperate to get the job done.	.79
WWG5	People in my work group try to do the best job possible.	.74
WWG13	People in my work group help one another to get hard jobs done.	.73
WWG14	People in my work group take pride in the jobs they do.	.71
WWG15	I feel that I am really part of my work group.	-.69
WWG19	How would you rate the quality of work done by your work group?	.58

Standardized alpha = .94

B. Work Group Performance (WKGP2)

WWG23	Most of the supervisors in this department feel that my work group's performance is (level of performance).	.76
WWG2	Most workers in this department feel my work group's performance is (level of performance).	.71
WWG12	How do you feel your work group performs compared to all others. in the department?	.69

Standardized alpha = .84

Summary of Factor Analyses and Scale Creation for Job
Characteristics, Personal Characteristics, Job
Satisfaction, Work Group Climate
and Overload/Ambiguity Constructs

Topic Area	Construct/Item Content	Factor Loading

VI. Supervisor Job Ambiguity/Job Overload (Constructs were created as suggested by a factor analysis of 10 items.)

A. Supervisor Job Ambiguity (SRA)

SRO4	Explanations are clear about what has to be done on my job.	.78
SRO5	On my job there are procedures for handling everything that comes up.	.73
SRO7	On my job I know exactly what is expected of me.	.73
SRO8	My job has rules and regulations for almost everything.	.71
SRO10	I know that I have divided my work time properly.	.53
SRO2	I don't know what my job responsibilities are.	-.40

Standardized alpha = .81

B. Supervisor Job Overload (SROV)

SRO6	There is not enough time for me to finish my work.	.86
SRO9	I have plenty of time to get my work done.	.82
SRO1	I have too much work for one person to do.	.75

Standardized alpha = .85

VII. Worker Job Ambiguity/Job Overload (Constructs were created as suggested by a factor analysis of 10 items.)

A. Worker Job Ambiguity (WRA)

WRO7	On my job, I know exactly what is expected of me.	.83
WRO4	Explanations are clear about what has to be done on my job.	.76
WRO3	Most of the time I know what I have to do on my job.	.56
WRO8	My job has rules and regulations for almost everything.	.49
WRO7	On my job there are procedures for handling everything that comes up.	.46
WRO10	I know that I have divided my work time properly.	.46
WRO2	I don't know what my job responsibilities are.	-.46

Standardized alpha = .75

B. Worker Job Overload (WROV)

WRO6	There is not enough time for me to finish my work.	.99
WRO1	I have too much work for one person to do.	.55
WRO9	I have plenty of time to get my work done.	-.73

Standardized alpha = .79

APPENDIX F

SCALES CREATED FOR TRUST, LOYALTY, TIME SPENT INTERACTING, AND SUPERVISORY EFFECTIVENESS

APPENDIX F

Scales Created for Trust, Loyalty, and Supervisory Effectiveness

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Construct/Item Content

I. **Worker Trust Toward Supervisor** (WKTRUST) (Factor analysis of 7 items yielded one factor.)[1]

WS2 You can count on your supervisor to bail you out when you really need him.

WS3 You can be confident your supervisor won't discuss personal conversations.

WS4 When your supervisor says he will do something, he does it.

WS5 You can depend on your supervisor to give you a straight answer.

WS6 Your supervisor will take credit for your work if he gets a chance.

WS7 You would feel comfortable letting your supervisor speak on your behalf.

Standardized alpha = .88

II. **Worker Loyalty Toward Supervisor** (WKLOYAL) (Factor analysis of 4 items yielded one factor.)

WS15 I feel a strong sense of loyalty to my supervisor.

WS16 I would rather work for my present supervisor than any other in the department.

WS17 Even if I didn't have to, I would still do any job my supervisor asked me to.

Standardized alpha = .74

III. **Supervisor Trust Toward Boss** (SUPTRUST) (Factor analysis of 7 items yielded one factor.)

SB2 You can count on your boss to bail you out when you really need him.

SB3 You can be confident that your boss won't discuss personal conversations.

SB4 When your boss says he will do something, he does it.

SB5 You can depend on your boss to give you a straight answer.

SB6 Your boss will take credit for your work if he gets a chance.

SB7 You would feel comfortable letting your boss speak on your behalf.

Standardized alpha = .88

IV. **Supervisor Loyalty Toward Boss** (SUPLOYAL) (Factor analysis of 4 items yielded one factor.)

SB15 I feel a strong sense of loyalty to my boss.

SB16 I would rather work for my present boss than any other in the department.

SB17 Even if I didn't have to, I would still do any job my boss asked me to.

Standardized alpha = .74

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[1] When factor analysis of a set of items yielded only one factor, constructs were created by averaging items which made a positive contribution to the standardized alpha for that scale.

Scales Created for Trust, Loyalty, and Supervisory Effectiveness

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Construct/Item Content

V. **Time Supervisors Spend Interacting with Boss (STIME)**

ST1 Time you spend talking with your boss about work.

ST5 Time you spend talking or socializing informally with your boss.

   Pearson correlation = .47

VI. **Time Supervisors Spend Interacting with Workers (WTIME)**

WT1 Time you spend talking with your supervisor about work.

WT4 Time you spend talking or socializing informally with your supervisor.

   Pearson correlation = .51

VII. **Effectiveness Ratings of Supervisor (WSRAV)[2] (GEAV)[3] (EFF)[4]**
(Factor analysis of 10 items yielded one factor.)

   WSR^1,GE1   Technical competence.

   WSR^2,GE2   Getting along with his boss.

   WSR^3,GE3   Giving directions clearly and when needed.

   WSR^4,GE4   Performing under pressure.

   WSR^5,GE5   Dependability.

   WSR^6,GE6   Cooperating with other supervisors to get the job done.

   WSR^7,GE7   Administrative competence.

   WSR^8,GE8   Getting along with the people who work for him.

   WSR^9,GE9   Getting or encouraging workers to do a good job.

   Standardized alpha = .92

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[2] WSRAV is an average of 9 effectiveness ratings made by workers.

[3] GEAV is an average of 9 effectiveness ratings made by bosses.

[4] EFF is an average of 18 effectiveness ratings made by both bosses and workers.

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